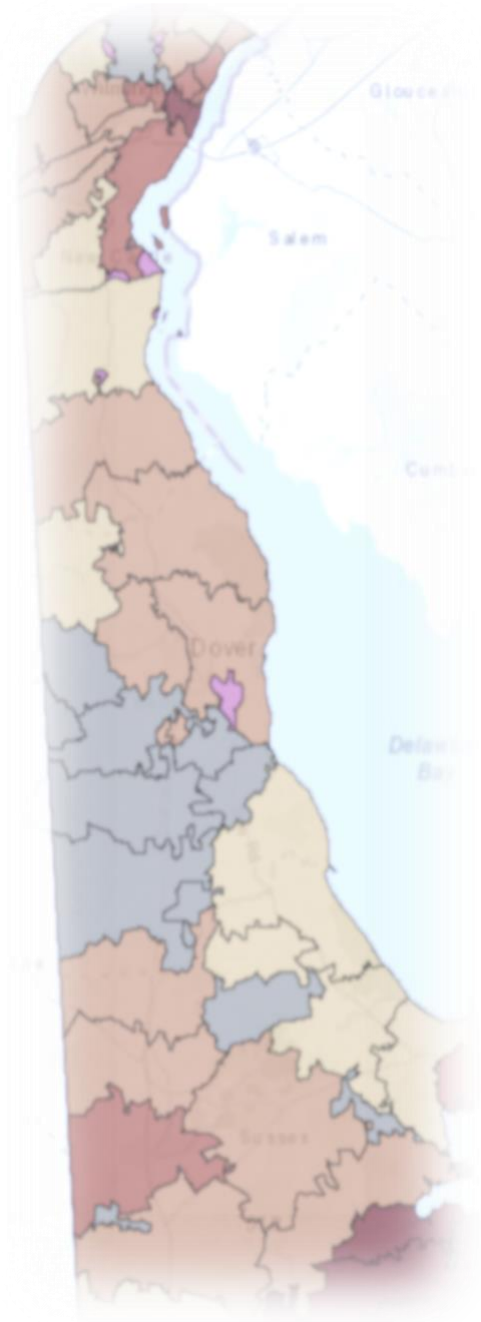

The 2021 Delaware Epidemiological Profile

Substance Use, Mental Health, and Related Issues

prepared for

Director Joanna Champney and the Delaware Division of Substance Abuse and Mental Health
&
The Delaware State Epidemiological Outcomes Workgroup

The annual Delaware Epidemiological Profile is a publication of the Delaware State Epidemiological Outcomes Workgroup (SEOW) project. Funding for the SEOW has been provided by the Department of Health and Social Services, Division of Substance Abuse and Mental Health through a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA). Please address all inquiries to Laura Rapp, PhD, University of Delaware Center for Drug and Health Studies, Department of Sociology and Criminal Justice: lrapp@udel.edu.

The Role of the

Delaware State Epidemiological Outcomes Workgroup

and the Purpose of the Epidemiological Profile

All states, including Delaware, received support from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Prevention (CSAP) to establish a Statewide Epidemiological Outcomes Workgroup (SEOW). The Division of Substance Abuse and Mental Health (DSAMH) in the Department of Health and Social Services initially supported the SEOW through SAMHSA Strategic Prevention Framework grants and continues to sponsor the SEOW with SAMHSA funding. The SEOW is facilitated by a team at the Center for Drug and Health Studies at the University of Delaware that convenes a network of representatives from over 50 State and nonprofit agencies, community organizations, advocacy groups, and other entities. Formerly known as the Delaware Drug and Alcohol Tracking Alliance (DDATA), the SEOW's mission is to bring data on behavioral health and associated issues to the forefront of prevention and treatment by pursuing the following goals:

- To build monitoring and surveillance systems to identify, analyze, and profile data from state and local sources;
- To provide current benchmarks, trends, and patterns of substance abuse consumption and consequences;
- To create data-guided products that inform prevention and treatment planning and policies;
- To train agencies and communities in understanding, using, and presenting data effectively.

The annual Delaware State Epidemiological Profile is a valuable data resource for strategic planning, decision-making, and evaluation. Using data that are available on an ongoing basis, the report highlights indicators of mental health and wellbeing, patterns of substance use and its consequences, and risk and protective factors for people in Delaware. The report also highlights crosscutting issues that warrant attention as well as populations that may experience disproportionate risk for these concerns.

To review slides, infographics, and other SEOW data products, please visit the UD Center for Drug and Health Studies Delaware Epidemiological Reports page. Video recordings of select SEOW presentations referenced in this report are also available online.

SEOW Collaborators

Thank you for your participation and commitment to data-driven prevention planning, practice, and evaluation! We are especially grateful to the team at the Delaware Division of Substance Abuse and Mental Health for their guidance and collaboration.

atTAcK Addiction
Bellevue Community Center
Christiana Care Health System
Colonial School District
Delaware Academy of Medicine/Delaware Public Health Association
Delaware Afterschool Network
Delaware Center for Justice
Delaware Coalition Against Domestic Violence
Delaware Council on Gambling Problems
Delaware Courts - Office of the Child Advocate
Delaware Criminal Justice Council
Delaware Criminal Justice Information System
Delaware Department of Education
Delaware Department of Services for Children, Youth and their Families
    Division of Prevention and Behavioral Health Services
Delaware Department of Health and Social Services
    Division of Medicaid and Medical Assistance
    Division of Public Health
    Division of Services for Aging and Adults with Physical Disabilities
    Division of Substance Abuse and Mental Health
Delaware Department of Safety and Homeland Security
    Delaware State Police
    Division of Alcohol and Tobacco Enforcement
    Division of Forensic Science
Delaware Department of State
    Delaware Office of Controlled Substances
    Division of Professional Regulation, Prescription Monitoring Program
Delaware Domestic Violence Coordinating Council

Delaware Guidance Services
Delaware Information and Analysis Center
Delaware Multicultural and Civic Organization
Delaware Prevention Coalition
Delaware State Board of Education
Holcomb BHS/Open Door, Inc.
KIDS COUNT in Delaware, University of Delaware Center for Community Research & Service
La Esperanza Community Center
Latin American Community Center
Mental Health Association in Delaware
Milford School District
NAMI Delaware
Nemours Health and Prevention Services
New Castle County Police Department
Planned Parenthood of Delaware
Red Clay Consolidated School District
Sun Behavioral Delaware
Sussex County Health Coalition
Transitions Delaware
Trauma Matters Delaware
United Way of Delaware
University of Delaware
    College of Health Sciences
    College of Arts and Sciences
    Partnership for Healthy Communities
    Student Health & Wellness Promotion
Wesley College
West End Neighborhood House
Wilmington University

SEOW Facilitator Team at the University of Delaware Center for Drug and Health Studies: Cheryl Ackerman, Jessica Arnold, Rochelle Brittingham, David Borton, Darryl Chambers, Miller Finkelstein, Bill Gratton, Stephanie Ha, James Highberger, Dana Holz, Steve Martin, Sharon Merriman-Nai, Dan O'Connell, Laura Rapp, Rachel Ryding, Meisje Scales, Rachael Schilling, Eileen Sparling, Wenjin Wang.

If your organization is interested in becoming an SEOW Collaborator, please contact Meisje Scales at: mjscales@udel.edu.

Table of Contents

Table of Figures

Notes on Data Reporting and Interpretation

In order to protect the anonymity of respondents and to ensure that the data reported meet certain statistical standards, the Center for Drug and Health Studies (CDHS) at the University of Delaware has established a set of guidelines for reporting and interpreting data from surveys that it administers to students across the state. As a result, in the Delaware State Epidemiological Profile, data in some tables and figures may be aggregated or otherwise reported differently than in years prior. The following notes summarize the guidelines for interpreting data presented in this report and provide an overview of changes relevant to this year:

- Reporting small numbers: For any estimate where the raw number of responses is less than 30, no statistical estimates are reported. Statistics computed from such a small proportion of the total number of students may be unreliable, inflating the significance of existing relationships in the data, and among some special populations, may put individuals at risk of being identified. In some data products such as our heat maps, multiple years of data have been combined in order to increase the sample sizes to a reportable figure.
- Rounding: All figures from Delaware School Survey (DSS) are rounded to the *nearest whole percent.* As such, in some cases the cells in a table may add up to slightly more or less than 100%.
- Missing Observations: In our analysis, any missing observations (responses) are not calculated into the total percentages. Because different questions have varying numbers of missing responses, the total sample size and percent missing may fluctuate slightly from question to question. This is due to a few factors:
    - Students may not answer all questions on a survey, particularly those towards the end if they run out of time or they tire of answering questions.
    - Students may also skip or decide not to respond to certain questions for various reasons (e.g., if they fear their responses will not be kept confidential; if they consider the question too personal or sensitive; if they do not understand the question; etc.)
- Discrepancies in Reporting: In some instances, there may be slight differences in estimates reported by the Center for Drug and Health Studies compared to those reported by other state or federal entities for the same data source. In most cases this is due to differing practices in rounding or handling missing observations in the data and does not substantially impact the overall prevalence estimates, trends, and relationships among these data points.
- Statistical Significance: Unless otherwise indicated, all reported correlations between variables are statistically significant at the $p<.05$ level. Null hypothesis testing, used to estimate statistical significance, provides an estimate of the likelihood that the relationship between two indicators is not due to random chance. If the p-value for a given crosstab is less than .05, this suggests that in 95% of cases, the correlation between the relevant variables is because there is a relationship between them.

- Weighted Data: Weighting data is a correction technique that compensates for nonresponses, helps correct for unequal probabilities of being selected within the sample, and helps ensure that the sample drawn is representative of the Delaware student population. If data is weighted, there will be a notation indicating the data is weighted for the specific fact, figure, or table.
    - A note about 2019 Youth Risk Behavior Survey (YRBS) Data: In previous years, Delaware received weighted Delaware YRBS survey data from the CDC for both middle and high school samples. However, during the 2019 administration, participation rates for the Delaware high school survey did not meet the required threshold for weighting the data. Therefore, this report only includes 2019 middle school findings from the YRBS. Whenever available, trend data from the CDC Youth Online Data Portal is also reported. Additional high school YRBS data from previous years may be requested by following the Delaware Division of Public Data Information & Request Process.
- Pandemic Impacts on Data Collection: In 2020, the advent of the COVID-19 pandemic and subsequent school closures and shifts to remote learning greatly impacted our ability to collect school survey data. As a result, in 2020, we are unable to report any data from the Youth Tobacco Survey (YTS) for middle or high school, or from the Delaware School Survey (DSS) for 5th and 11th graders. We are, however, able to report figures from the 8th grade Delaware School Survey, based on responses from 3,799 respondents.

2021 DELAWARE STATE EPIDEMIOLOGICAL PROFILE SUBSTANCE USE AND RELATED ISSUES

Executive Summary

Introduction

Each year, the Center for Drug and Health Studies at the University of Delaware (CDHS), the facilitator of the State Epidemiological Outcomes Workgroup (SEOW)[1], releases the Delaware State Epidemiological Profile which highlights the most recently available data on behavioral health among various populations in Delaware and nationwide. The 2021 Profile includes the following chapters:

- About Delaware: State Demographic Background and a Snapshot of Substance Use
- Tobacco and Electronic Cigarettes (Vaping)
- Alcohol
- Marijuana
- Opioid Use
- Other Illegal Drugs
- Infants with Prenatal Substance Exposure
- Gambling
- Mental Health and Wellness
- Persons with Disabilities
- Adverse Childhood Experiences
- Gender and Sexuality
- Protective Factors

The Delaware State Epidemiological Profile is a comprehensive and robust document which incorporates data from approximately 40 State and national resources. The findings from this report can serve as a powerful tool for stakeholders to make informed decisions and to implement policies and interventions responsive to the health needs of Delaware's residents. It is intended to help prevention advocates, service providers, and others accomplish goals related to needs assessments, strategic planning, evaluation, and research.

The first chapter provides an overview of demographic and other characteristics of Delaware. Subsequent chapters provide data relevant to specific types of substance use, crosscutting issues, and populations who experience disproportionate rates of risk behaviors. This Executive

[1] The SEOW project was originally established with funding under the federal Strategic Prevention Framework initiative on behalf of the Delaware Division of Substance Abuse and Mental Health.

Summary includes a synopsis of highlights on each topic including notable trends. When observed, associations between population characteristics and rates of behaviors are reported. However, it is important to note that while there is often a strong statistical association between substance use, risk behaviors, and other measured indicators, this does not necessarily mean that there is a causal relationship between these variables in all instances, and there may be additional unobserved indicators that also influence the outcome.

Chapter Highlights

State Demographic Background: Delaware is the second-smallest state in the U.S. There is an estimated population of 989,948 people, representing a 10% increase in the past decade, living among its three counties (U.S. Census Bureau, n.d.). The northern part of the state (New Castle County) is more densely populated than the two southern counties (Kent and Sussex), which are predominantly rural. Approximately one in five residents are under the age of 18 with a similar percentage aged 65 and older. The state has become more diverse since 2010: three out of five residents identify as White; 22.1% as Black or African American; 4.3% as Asian; 0.5% as American Indian and Alaska Native; 7.7% as two or more races; and 8.9% as some other race alone or in combination. One in ten Delawareans are Hispanic or Latino/a/x, and 14% report speaking a language other than English at home (U.S. Census Bureau, n.d.).

Median household income for the state is $68,287, with 11.3% of residents living in poverty (U.S. Census Bureau, n.d.). Approximately 93% of state residents have some form of health insurance (United Health Foundation, n.d.). In November 2020, 60,582 Delaware families received assistance from the Supplemental Nutrition Assistance Program (KIDS COUNT in Delaware, Annie E. Casey Foundation, 2021). According to the U.S. Bureau of Labor Statistics, in July 2021, Delaware's seasonally adjusted unemployment rate was 5.6%, down from 10.5% at the same time in 2020 when the state experienced a dramatic rise in unemployment due to the onset of the COVID-19 pandemic. Much of Delaware is considered a Medically Underserved Area (Health Resources and Services Administration, n.d.), with all of Kent and Sussex Counties fitting the criteria, as well as communities in southern and eastern New Castle County.

Tobacco/Electronic Cigarettes: While tobacco use remains a serious national and local health issue, data from five major survey sources show that Delaware youth and adults continue reporting a steady decline in cigarette use since the late 1990s. At that time, a third of Delaware's 11th graders and one in five 8th graders reported regularly using cigarettes (Delaware School Survey [DSS], 1999). These rates dropped to 3% among 11th graders by 2019 and 1% among 8th graders as of 2020. Of concern, however, perception of the risk of smoking has decreased over time. Less than half of 8th graders (46%) perceive there is a great risk of harm from smoking a pack of cigarettes per day (DSS, 2020). This represents a 10% drop from 56% in 2019 and is the first time such perception of risk has dipped to below half of all 8th graders in 20 years.

Though the decline in cigarette use is promising, over the past decade the use of e-cigarettes or vaping devices has increased, possibly due to the perception that these products are safer alternatives to cigarettes. In 2019, 4.6% of Delaware middle school students reported using vape

products (down from 8.4% in 2015) and 6% reported that they have either smoked cigarettes, cigars, used smokeless tobacco, or an electronic vaping product within the past month (Delaware Middle School Youth Risk Behavior Survey [YRBS], 2019).

Past month smoking rates among Delaware adults also decreased over the past decade from 21.8% in 2011 compared to 15.9% in 2019 (Behavioral Risk Factor Surveillance System [BRFSS], 2019). According to the BRFSS, smoking tends to be most common among young adults (aged 25 to 34 years) and is associated with lower levels of educational attainment (2019).

Alcohol: Data from the most recent Delaware School Survey (DSS) and Youth Risk Behavior Surveys (YRBS) illustrate that alcohol and marijuana remain the most commonly reported substances used by students throughout the state. In 2019, one in four 11th graders reported drinking alcohol in the month prior to responding to the DSS. In 2020, 7% of 8th graders reported drinking alcohol in the prior month (DSS, 2020). Although alcohol use among Delaware students declined over the past five years, mirroring national trends, student surveys show that too many students still do not adequately understand the risks involved with alcohol use; only 37% of 8th graders identified binge drinking as a great risk in the 2020 DSS, down from 49% the preceding year.

Overall, adults in Delaware tend to consume alcohol at rates comparable to national estimates, with 57% reporting current use (Behavioral Risk Factor Surveillance System [BRFSS], 2019). More than one in three Delaware adults between the ages of 18 and 25 reported binge drinking within the previous month (National Survey on Drug Use and Health, 2018-2019). In 2019, the Treatment Episode Data Set (TEDS) indicates that alcohol was the primary substance reported at admission among 10.7 % of clients receiving publicly funded treatment in Delaware, and it was identified as a secondary substance in another 8.2% of admissions.

Driving while intoxicated remains a major public health concern. In 2020, 4% of all traffic crashes in Delaware were alcohol-related. Thirty percent of traffic fatalities and 7% of traffic-related injuries were associated with crashes involving alcohol, and 2,478 driving under the influence (DUI) arrests were made statewide (Delaware State Police, Delaware Information and Analysis Center, 2021).

Marijuana: Over the past couple of decades, states have enacted various laws that have changed the legal status of marijuana. Delaware currently permits medical marijuana for certain conditions and has decriminalized the possession of small amounts of marijuana by adults. Given the shifting legal status of marijuana, the perception of risk of harm from marijuana use has declined among students surveyed by the Delaware School Survey (DSS, 2010-20) over the past decade. Seven percent of 8th graders reported past month use of marijuana in 2020 (Delaware School Survey), 2% reported heavy use (defined as using more than six times in the past month), and only 33% reported they perceived a great risk in using marijuana regularly. Alternate methods of ingesting marijuana have become more popular, including vaping, edibles, and marijuana concentrates. The 2020 DSS indicates that 2% of 8th graders used edibles to ingest marijuana and 2% vaped it in the past month. Fourteen percent of 11th graders responding to the

2019 DSS reported that at some point in their lives they had driven a car after smoking marijuana, and 7% reported that they had done so in the month prior to taking the survey (DSS, 2019).

Delaware adults use marijuana at slightly higher rates than the national average. This is particularly true among young adults aged 18 to 25, who reported a past year use rate of 41% and a monthly rate of nearly 28%. (National Survey of Drug Use and Health, 2018-2019).

Opioid Use: The CDC estimates Delaware's 2019 drug overdose mortality rate as 48 deaths per 100,000 residents, (CDC, n.d.), ranking second among all states and substantially higher than the national rate of 21.6 deaths per 100,000 (Hedegaard, Minino, & Warner, 2020). Among the 447 overdose deaths recorded in 2020, fentanyl was identified in 372 and 94 involved heroin (Delaware Division of Forensic Science, 2021). Almost half of individuals admitted to publicly funded treatment programs in Delaware in 2019 listed heroin as their primary drug. An additional 7% of treatment admissions were primarily attributed to use of other opiates (Treatment Episode Data Set, 2019). Results of the 2018-2019 National Survey on Drug Use and Health [NSDUH] estimate that 3.45% of all Delawareans aged 12 and older and 3.28% of adults aged 26 and older have misused prescription pain relievers in the past year. The highest rate of misuse occurs among adults aged 18 to 25 (5.43%).

The 2020 Delaware School Survey data indicate that approximately 4% of 8th grade students report rates of lifetime misuse of prescription pain medications, a past year misuse rate of 3%, and a past month misuse rate of 2%. These results also indicate that less than half (46%) of 8th graders perceive a great risk in misusing pain medications in ways other than prescribed.

On a positive note, the rate of Delawareans filling opioid prescriptions has continued to decline since 2015, when it was 204 per 1,000 people to 120 per 1,000 in 2020. Additionally, the rates of instant relief and high-dose opioid prescriptions being filled have declined since 2012 (Delaware Department of Health and Social Services, n.d.).

Other Illegal Drugs: According to the National Survey on Drug Use and Health (NSDUH) 2018-2019 estimates, in Delaware, approximately 4% of all people aged 12 and over used an illicit drug in the past month.[2] The 2018-2019 NSDUH also estimates that approximately 2.21% of Delaware adults age 12 and older have used cocaine in the past year, with adults aged 18 to 25 reporting highest rates of use (6.63%). The Division of Forensic Science 2020 Report indicates that 152 overdose deaths in Delaware involved cocaine (Division of Forensic Science, 2021).[3] Approximately 5% of all drug treatment admissions to publicly funded treatment programs in the state were primarily due to cocaine use (Treatment Episode Data Set [TEDS], 2019).

Five percent of 8th grade students reported using synthetic marijuana at least once in their lifetime, 3% reported past year use, and 2% reported past month use on the 2020 Delaware

[2] The National Survey on Drug Use and Health includes the following in this calculation: misuse of prescription psychotherapeutics, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. It does not include marijuana.

[3] To explore interactive maps on overdose death rates at the Census tract, zip code, county, and state level, visit the Delaware Opioid Metric Intelligence Project (DOMIP) on the Center for Drug and Health Studies at the University of Delaware website.

School Survey (DSS). Other 2020 DSS results also indicate that 2% of 8th grade students reported use of an illicit drug (other than marijuana) in the past month and 5% within the past year, and one in ten students reported misuse of prescription and over-the-counter medication (including pain medication) within the previous year. Concurrently, less than half (46%) of 8th graders perceive a great risk in misusing medication.

Infants with Prenatal Substance Exposure (IPSE): Infants are a special population that can be uniquely impacted by substance use. Heavy prenatal substance exposure can lead to conditions such as neonatal abstinence syndrome, fetal alcohol spectrum disorders, or other developmental delays, and has the potential to create additional health issues during infancy and later in life. In 2020, there were 702 cases of substance-exposed infant births reported in Delaware with marijuana the most commonly identified substance in cases involving one or two substances. In cases of polysubstance exposure (three or more substances present at birth) opioids followed by methadone, fentanyl, and cocaine were most commonly identified. Fentanyl exposure has increased and was identified in 72 or approximately 10% of IPSE births in 2020. Notably, 40% of the mothers who gave birth to prenatally substance exposed infants reported that they themselves have a history of involvement with family services as a youth or a history of childhood trauma and 56% reported having a mental health condition. Early, coordinated intervention and family support are critical to ameliorating negative impacts of prenatal substance exposure. In 2020, plans of safe care were established for 653 of the 702 infants born with prenatal substance exposure; with these supports, 88% of infants were able to remain in the home with the mother at the time of discharge (Delaware Office of the Child Advocate, 2021).

Gambling: Gambling has become an area of interest among prevention specialists. Most forms of gambling are legal in Delaware, with three casinos across the state and sports betting recently legalized. While many people can enjoy gambling harmlessly, for others, problem gambling and gambling disorders can present numerous challenges and negative consequences. There is evidence that gambling disorders often co-occur with other mental health and substance use disorders among adults (Petry, Stinson, & Grant, 2005; Martin, Usdan, Cremeens, Vail-Smith, 2014). Gambling is prevalent among Delaware youth; among 8th graders surveyed in Delaware, approximately half (51%) reported that they gambled at least once in the past year. Male students reported higher rates of gambling than female students. Students who reported past year gambling were three times as likely to report past year rates of alcohol and marijuana use and lifetime misuse of prescription pain medicine (Delaware School Survey, 2020).

Mental Health and Wellness: According to the Centers for Disease Control and Prevention (CDC), more than half of all people in the U.S. will be diagnosed with a mental illness or disorder at some time; one in five Americans will experience a mental illness each year; one in five children will experience a "serious debilitating mental illness;" and 4% of adults live with a serious mental illness such as major depression or schizophrenia (CDC, n.d). Mental health problems and substance use disorders often co-occur (National Institute of Drug Abuse, 2020). The 2018-2019 National Survey on Drug Use and Health (NSDUH) estimates that in the year prior to the survey: approximately 20% of Delaware adults aged 18 and over experienced any mental illness; approximately 5.4% experienced a serious mental illness; approximately 8.5% experienced a

major depressive episode; and one in 20 had serious thoughts of suicide (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.). In 2019, 13.5% of Delaware adults experienced frequent mental distress with younger adults (aged 18 to 44) being the most affected (United Health Foundation [UHF], n.d.). The age-adjusted suicide rate for Delaware in 2018 was 11.4 deaths per 100,000 (Delaware Department of Health and Social Services, Division of Public Health, n.d.) and there were 125 suicide deaths in the state in 2020 (Delaware Division of Forensic Science, 2021).

Among Delaware youth, in 2017, one in four high school students reported feeling sad or hopeless almost every day for two weeks or more in a row in the previous year (Delaware High School Youth Risk Behavior Survey [YRBS], 2017). Seven percent reported that they had attempted suicide the prior year, which is similar to national YRBS rates. In 2019, 11% of Delaware middle school students reported that they had purposely hurt themselves without wanting to die during the previous year (Delaware Middle School YRBS, 2019). From 2013 to 2019, the percentage of middle school students who reported they had ever attempted suicide increased from 6.8% to 8.5% (Delaware YRBS, 2013-2019). The Delaware School Survey (DSS) also includes questions regarding students' mental health. In 2020, one in five 8th graders reported symptoms of anxiety on more than half of the days in the previous two weeks and 16% reported feelings of depression. Female students were two and half times as likely to report feeling depressed or anxious compared to male students.

Although Delaware data is not yet available on mental health throughout the COVID-19 pandemic, several national studies suggest that many people have experienced higher levels of distress since the start of the pandemic, a period also marked by social and political unrest and economic uncertainty. (American Psychological Association, 2021; Rapid Assessment of Pandemic Impact on Development – Early Childhood [RAPID-EC], 2021, Czeisler et al., 2021).

Persons with Disabilities: There are definitional variations and other challenges to collecting data regarding persons with disabilities and their needs, yet research indicates that these individuals often face significant health disparities in comparison to the general population, including disparate health outcomes and reduced healthcare access (Okoro, Hollis, Cyrus, & Griffin-Blake, 2018). Additional national research indicates that disparities also exist in rates of substance use (Glazier & Kling, 2013) and prescribing of opioids (Hong, Geraci, Turk, Love, McDermott, 2019). Prevalence estimates of persons with disabilities in Delaware range from 12.7% to 25.5% (American Community Surveys, 2015-2019; Behavioral Risk Factor Surveillance System [BRFSS], 2019). Delaware adults with disabilities experience considerably higher rates of smoking, e-cigarette use, obesity, and depression than persons without disabilities, according to the 2019 BRFSS results (CDC, Disability and Health Data System, n.d.).

The National Survey of Children's Health (2018-2019) indicates that 14.7% of children in Delaware have one functional difficulty[4] and 14.6% have two or more. The Delaware Department of

[4] Functional difficulty, as defined by the National Survey of Children's Health, requires one of 12 of the following conditions: frequent or chronic respiratory problems (past year); difficulty eating or swallowing (past year); stomach/intestinal problems (past year); repeated or chronic pain, including headaches (past year); difficulty using

Education (DOE, n.d.) reports that 16.7% of students currently enrolled in public schools have a disability. Youth survey data also indicate elevated risk of adverse outcomes for students who have a disability compared to students who do not. Three in ten 8th grade students responding to the 2020 Delaware School Survey reported having a disability.[5] Students who reported having a disability also reported higher rates of all substance use and poorer mental health outcomes.[6]

Adverse Childhood Experiences (ACEs): ACEs are traumatic events or conditions such as abuse, neglect, or parental divorce or separation that, when experienced in childhood, can result in toxic stress and may have long-lasting negative impacts on individuals (Trauma Matters Delaware, n.d.; Center on the Developing Child, Harvard University, n.d. Brown et al., 2009). Experiencing one type of trauma increases the risk of experiencing additional traumas, and exposure to multiple ACEs can have a compounded effect. Without intervention and support, children who experience traumatic events are likely to have increased health problems throughout their lives—lives that are likely to be shorter than the lives of others (Centers for Disease Control and Prevention [CDC], n.d.). Available data suggest that Delawareans experience rates of childhood adversity similar to national rates. In 2015, the Delaware Public Health Institute conducted the Delaware Household Health Survey, which asked adult respondents about their experiences with childhood trauma. Half of adults in Delaware reported experiencing one or more of the original ACEs, with 13.8% reporting four or more. When factoring in being bullied and/or experiencing discrimination (two indicators added to the survey), 59% of adults reported having at least one ACE, with 16% reporting four or more (Public Health Management Corporation, 2016; Fink, 2016). For the first time in 2019, the Delaware Division of Public Health (DPH) included the optional ACEs module in the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) survey. BRFSS findings reveal that ACEs are common in Delaware; approximately two out of three adults experienced at least one ACE, with 43.3% experiencing two or more. Similar to the Delaware Household Health Survey, the most common adversity reported was living with divorced or separated parents (28.5%), followed by living with a problem drinker (23.5%), exposure to domestic violence (18%), and living with someone with a mental illness (17.3%).

The National Survey on Children's Health (NSCH, 2016-2019) findings indicate that approximately 43% of Delaware youth experienced at least one ACE, most commonly having divorced or separated parents or experiencing economic hardship. The third most common ACE reported is living with a person with a substance use disorder, followed by parental incarceration. Parents reported that 6.1% of children have been treated unfairly because of race, one of several

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hands (0-5 years); difficulty with coordination and movement (0-5 years); serious difficulty concentrating, remembering, or making decisions (6-17 years); serious difficulty walking or climbing stairs (6-17 years); difficulty dressing or bathing (6-17 years); difficulty doing errands alone (12-17 years); deafness/hearing problems; and blindness or vision difficulties even when wearing glasses.

[5] Disability status from the Delaware School Survey includes having a serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability.

[6] The Delaware School Survey analysis highlighted in this report incorporates responses from students who self-identify as having a disability as well as those who reported that they have been diagnosed with a physical, mental, or emotional disability by a medical professional.

indicators on the rise, including parental divorce and separation, parent or guardian death, and having been the victim of violence. More than one in five (21.9%) of Delaware youth have been exposed to two or more ACEs, and youth who are Black (non-Hispanic), whose parents were born outside of the U.S., who are poor, or who have special healthcare needs have experienced higher rates of ACEs. Conversely, children in families with high levels of resilience were less likely to have been exposed to multiple ACEs[7] (Hussaini, 2021).

The Delaware Secondary School Survey (DSS) includes a number of questions that address trauma as well as substance use and mental health. Two out of three 8th graders reported experiencing at least one ACE, and nearly one in four revealed having exposure to three or more on the 2020 survey. Most commonly, students reported being bullied (30%), being hit by another teen (25%), living with someone with a substance use disorder (24%), witnessing violence at home (22%), and living with someone with mental illness (22%). According to the 2020 DSS, youth who reported experiencing trauma were more likely to report use of all substances as well as symptoms of depression. Students who experience multiple ACEs have even greater rates of substance use or mental health concerns.[8]

Gender and Sexuality: The lesbian, gay, bisexual, and transgender (LGBT)[9] population constitutes approximately 4.5% of the adult U.S. population (Williams Institute, 2019). Members of this community have consistently faced discrimination, harassment, and violence at the interpersonal and systemic levels. Despite making up a substantial portion of the population and ample evidence of discriminatory practices and policies, historically, research on LGBTQ individuals has not been robust nor conducted on a nationally representative scale. Difficulties in data collection are due to limitations of survey instruments, a lack of a mandate to collect this information, the complexities of gender identity and expression, and for other reasons. However, most existing research provides strong evidence that the disadvantages faced by members of the LGBTQ community are also associated with disproportionate risk for substance use, poor mental health, social and emotional instability, and violent victimization. Data from the 2019 National Survey on Drug Use and Health shows that more than a third (35.6%) of lesbian, gay, and bisexual (LGB) adults aged 18 to 25 report using marijuana in the past month (SAMHSA, 2020). There have also been significant increases in past month and daily marijuana use among LGB adults 26 and older.

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[7] For more on the NSCH Family Resilience Index, please see Chapter 13 of this report, Protective Factors.

[8] It is important to note that while there is a statistical association between these factors, this does not necessarily mean that there is a causal relationship between these variables in every instance, and there may be additional unobserved indicators that also influence the outcome. This holds true for all of the associations discussed in this chapter.

[9] While the acronym LGBT explicitly references lesbian, gay, bisexual, and transgender identities, there are a variety of sexual orientations and gender identities that may be included within this community, such as pansexual, asexual, queer, non-binary, or people who are questioning their sexuality and/or gender. The letter "Q" has multiple meanings in this context. It is typically short for queer but can represent those individuals who do not feel fully represented by the adjectives of lesbian, gay, bisexual, or transgender, or those who are questioning or unsure how they identify in terms of sexual orientation, gender identity, or in terms of gender expression. While the LGBTQ acronym (or LGBT depending on the wording of the referenced data source) is used in this text, it is important to acknowledge that this is an imperfect and non-exhaustive identifier, and many sources may use variations of this acronym to refer to the community. The Trevor Support Center and GLSEN offer terminology resources on this topic.

In 2019, approximately 18.3% of LGB adults age 18 or older met the criteria for a substance use disorder, and 12.9% met the criteria for both a substance use disorder and a mental illness (SAMHSA 2020). It is important to note that differences in these rates are not intrinsically associated with being LGBTQ but rather relate to the adversities that these individuals frequently face concerning their sexual orientation or gender identity.

Similar disparities are observed among youth. Data from the National Youth Risk Behavior Survey in 2019 found that LGB high school students report significantly higher rates of past month alcohol, marijuana, and cigarette use than their heterosexual peers. LGB students also attempted suicide in the past year at more than three times the rate of heterosexual students.

Protective Factors: While childhood trauma is associated with higher rates of health issues and risk behaviors, positive experiences and conditions can function as protective factors. The final section of this report focuses specifically on the role of protective factors at the individual, family, peer, and community levels. The National Survey on Children's Health (NSCH) includes a number of protective factor indicators, including a series of four questions that comprise a Family Resilience Composite Measure. The questions ask parent respondents to report if the child lives in a home where family members: *talk together about what to do; work together to solve problems; know that they have strengths to draw upon; and stay hopeful even in difficult times.* Approximately four out of five parent respondents of children living in Delaware agree with all of these statements most or all of the time, commensurate with the rate among the national sample. Additionally, more than half of Delaware parents reported having attended an event or activity of their child within the past year; two-thirds of parents reported that the family ate together at least four days a week; and more than half of parents of younger children reported that someone in the family read to them at least four days a week. Delaware parents also reported children had high levels of school engagement and more than three quarters of respondents reported their children aged 6 to 17 had no difficulty making and keeping friends.

Results from the 2020 Delaware School Survey (DSS) highlight associations between select protective factors and rates of substance use as well as mental health indicators among 8th grade students.[10] Overall, 95% of students reported having at least one person as a source of support and encouragement, most commonly a parent or guardian, followed by friends and then teachers. Students who reported higher grades reported lower rates of vaping, alcohol, and marijuana use, and those who cared about doing well in school reported lower substance use rates as well as lower rates of anxiety and depression. The most notable associations were among students who reported getting along with their parents; students who did not get along regularly with their parents were approximately three times as likely to have used alcohol, marijuana, or vape products within the past year. These students were also three times as likely to report experiencing anxiety and more than four and a half times as likely to report symptoms of depression on more than half of the days in the previous two weeks. Feeling safe in the

[10] It is important to note that while there is a statistical association between these factors, this does not necessarily mean that there is a causal relationship between these variables in every instance, and there may be additional unobserved indicators that also influence the outcome. This holds true for all of the associations discussed in this chapter.

neighborhood and at school were also associated with lower rates of anxiety and depression, and feeling safe in the neighborhood was also associated with lower rates of substance use.

Finally, several questions on the DSS are based on the Cantril Ladder, which asks the following: *Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.* Two-thirds of 8th graders rated themselves in the top tier of the ladder at the time of the survey and three-quarters envisioned themselves being in the top tier in five years. Students who rate themselves at the top tier are considered to be *thriving.*[11] The data suggests that the majority of students are hopeful about where they will be in life in the future.

COVID-19 in Delaware

Delaware continues to face significant health, economic, and social challenges related to the ongoing COVID-19 pandemic which resulted in a stay-at-home order in March 2020 that lasted through much of the past year. The availability of vaccines and federal COVID relief measures have enabled many businesses and institutions to re-open or remain operational to some degree. For example, schools resumed in person learning in August 2021, and will operate with the Governor's recent mask requirement in place (which also applies to child care centers and state facilities). As of August 30th, 2021, 60% of the eligible population were fully vaccinated in Delaware, and three out of four residents aged 18 and over had received at least one vaccination. However, the emergence of COVID-19 variants has resulted in recent increases of infections, hospitalizations, and deaths – predominantly among the unvaccinated – throughout the U.S. as well as in Delaware (My Healthy Community, n.d.). The rise in COVID cases and subsequent demands on the health care system may also indirectly impact the availability and accessibility of routine and other health care resources, which is likely to be exacerbated if health care professionals continue to feel overwhelmed. A recent KFF/Washington Post survey indicates that 29% of health care workers have considered leaving their profession as a result of the pandemic (2021). National research suggests that some individuals have experienced higher rates of substance use, depression, anxiety, and other challenges since the onset of COVID-19 (American Psychological Association, 2021; Rapid Assessment of Pandemic Impact on Development – Early Childhood [RAPID-EC], 2021, Czeisler et al., 2021). It will be important to monitor state level data as it becomes available to watch for similar trends and disparities in order to address the needs of Delaware residents.

[11] Present and Future scales vary slightly. The Present scale categorizes steps 7-10 as *Thriving* and steps 5-6 as *Struggling*. The Future scale categorizes steps 8-10 as *Thriving* and 5-7 as *Struggling*. Both scales categorize steps 0-4 as *Suffering*.

2021 DELAWARE STATE EPIDEMIOLOGICAL PROFILE SUBSTANCE USE AND RELATED ISSUES

1. About Delaware: State Demographic Background and a Snapshot of Substance Use

State Overview

The population of Delaware is growing and becoming increasingly diverse.

Delaware residents continue to face significant health, economic, and social challenges related to the COVID-19 pandemic.

Delaware is the second smallest state in the United States, with total landmass of 1,949 square miles (U.S. Census Bureau, n.d.). There are three counties: New Castle, the most populated, and Kent and Sussex counties, which are primarily rural. According to the 2020 Census[12], the state population is 989,948, representing a 10% growth in the last decade, exceeding the national increase (U.S. Census, n.d.). Approximately one in five residents are under the age of 18, with a similar percentage aged 65 and older. The population has become more diverse since 2010; three out of five residents identify as White, 22.1% as Black or African American, 4.3% as Asian, .5% as American Indian and Alaska Native, 7.7% as two or more races, and 8.9% as some other race alone or in combination. One in ten report their ethnicity as Hispanic or Latino/a/x, and 14% report speaking a language other than English at home (U.S. Census Bureau, n.d.).

Based on the 2015-2019 American Community Survey estimates, median household income in Delaware is $68,287 with 11.3% of residents living in poverty (U.S. Census Bureau, n.d.). Approximately 93% of state residents have some form of health insurance (America's Health Rankings, 2020). In November 2020, 60,582 Delaware families received assistance from the Supplemental Nutrition Assistance Program (SNAP) (KIDS COUNT in Delaware, Annie E. Casey Foundation, 2021). According to the U.S. Bureau of Labor Statistics, in July 2021, Delaware's seasonally adjusted unemployment rate was 5.6%, down from 10.5% at the same time in 2020 when the state experienced a dramatic rise in unemployment due to the onset of the COVID-19 pandemic.

Due to unique tax and corporate policies and access to the Delaware Court of Chancery, Delaware has attracted more than half of all U.S. publicly traded companies to incorporate in the state. For this reason, Delaware is often named the "corporate capital of the world." Two of Delaware's major industries are corporate financing and banking. Delaware's economy is also driven by chemical manufacturing, aviation, health services, tourism, and agriculture. In Kent and Sussex counties, agriculture has greater predominance. The state's largest agricultural output is broiler chickens, followed by soybeans and corn. Many thousands of people from across the country visit Delaware's beach resort towns every year, making tourism a great driver of

[12] Throughout this report, 2020 Census data is used if it is available; population data are supplemented with the most recent American Community Survey (ACS) rolling estimates which are also published by the U.S. Census Bureau.

economic development in Sussex County (Division of Small Business Development and Tourism, n.d.). However, both of these industries have been affected by the COVID-19 pandemic.

New Castle County Overview

The northernmost and most densely populated county, New Castle, has an estimated population of 570,719, representing an increase of 6% since 2010 (U.S. Census Bureau, n.d.). Delaware's largest city, Wilmington, is located in the county, with an estimated 70,166 people living in the city as of July 2019 (U.S. Census Bureau, n.d.). There is a surge in the number of people in the downtown business district during the day, with much of that population leaving the city for homes in the suburban outlying areas at night. Recent residential and business developments along the waterfront in the city were designed, in part, to attract more working professionals to the city to live, dine, and find entertainment. Efforts to motivate locals to dine and entertain in the city are hampered by concerns over high crime rates, and more recently by the COVID-19 pandemic. Attention to increasing homicide rates led local residents and policymakers to call gun violence a public health epidemic, and epidemiologists from the CDC treated it as such and spent several months in 2015 identifying risk factors that led to gun violence within the city (Sumner et al., 2015). One in four Wilmington resident experiences poverty, which is double the rate of the state's overall population (U.S. Census Bureau, n.d.).

Newark, the state's third largest city, with an estimated 33,515 people in 2019, is also located in New Castle County (U.S. Census Bureau, n.d.). Delaware's flagship university, the University of Delaware, is located in Newark. Towns in lower New Castle County, such as Middletown and Townsend, have seen explosive growth in the past two decades.

Kent County Overview

An estimated 181,851 residents live in centrally located Kent County, which experienced an overall 12% increase in population between 2010-2020 (U.S. Census Bureau, n.d.). Dover, the state's capital and second largest city, is located in Kent County. The city is home to the Dover Air Force Base and the Dover Downs International Speedway. Delaware State University and Wesley College are based in Dover, and Delaware Technical Community College and Wilmington University also have locations in the city. Although the county rate of poverty is 12.7%, the rate is nearly double for residents of Dover (U.S. Census Bureau, n.d.).

Recent residential developments have attracted more people to Kent County. Cheswold and Clayton are two towns where population has increased dramatically since 2000.

Sussex County Overview

Sussex County, the southernmost county, is home to several beach resort towns that support a large influx of people during the warmer months but a smaller year-round population. According to 2020 Census results, the population of Sussex County is an estimated 237,378 residents, demonstrating the highest rate of growth (20%) in the state since 2010 (U.S. Census Bureau, n.d.). As of July 2019, 12.1% of the population live in poverty (U.S. Census, n.d.).

During the tourist season, tremendous congestion and traffic are evident in these coastal towns. Milford, Georgetown, and Seaford are the three largest cities in the county, all of which are inland from the coast and have primarily year-round populations. Poultry processing is a major industry in Sussex County, and a significant immigrant and migrant worker population is associated with the industry. These official numbers may still reflect an undercount of total population growth, as migrant and immigrant workers are often uncounted by the U.S. Census.

Medically Underserved Areas

The Health Resources and Services Administration (HRSA) uses existing data to determine areas of the country that are medically underserved and lack access to primary care doctors. Occasionally, areas do not fit official criteria for being medically underserved, but local stakeholders, aware of local context and realities, can petition to designate the area as medically underserved if additional data show that the population has difficulty in accessing primary care. In Delaware, much of the southern and eastern communities in New Castle County are currently considered a Medically Underserved Area (MUA) under the Governor's Exception Criteria, with several census tracts within the city of Wilmington considered an MUA using the HRSA coding criteria. All of Kent County is considered an MUA under the Governor's Exception Criteria. Sussex County is considered an MUA under the HRSA coding criteria (Health Resource and Services Administration, n.d.). Delaware is currently ranked 10th throughout the U.S. with 287.5 primary care providers per 100,000 population. Multiple chronic conditions, adverse childhood experiences (ACEs), premature death, obesity, low birth weight, violent crime, and preventable hospitalizations are core measures with negative impacts on Delaware's health (United Health Foundation [UHF], n.d.).

According to America's Health Rankings, in 2019, 13.5% of Delaware adults reported they experienced frequent mental distress (United Health Foundation [UHF], n.d.). These data were collected before the COVID-19 pandemic; therefore, behavioral health issues may be even greater. Coupled with under-resourced service areas, this amplifies the need for preventive health services, including strategies to bolster behavioral health.

COVID-19 in Delaware

Delaware continues to face significant health, economic, and social challenges related to the ongoing COVID-19 pandemic which resulted in a stay-at-home order in March 2020 that lasted through much of the past year. Positive cases peaked in early January 2021. The availability of vaccines and federal COVID relief measures have enabled many businesses and institutions to re-open or remain operational to some degree, some with telecommuting components. In August 2021, schools resumed in person learning and are operating with the Governor's recent mask requirement in place (which also applies to child care centers and state facilities).

According to the My Healthy Community COVID-19 Dashboard, as of August 30th, 2021, 60% of the eligible population were fully vaccinated in Delaware, and three out of four residents aged 18 and over had received at least one vaccination (State of Delaware, 2021). However, the emergence of COVID-19 variants has resulted in recent increases of infections, hospitalizations, and deaths – predominantly among the unvaccinated – throughout the U.S. and in Delaware. From mid-July through mid-August, the new case rate increased throughout the state from 38.4 to 235.7 per 100,000 of population (My Healthy Community, n.d.). While this is not currently among the highest rates of infection (compared, for example, to Florida with a new case rate of 543 per 100,000 at that time), it is well above the 100 cases per 100,000 of population that is considered a high rate of transmission. The rise in COVID cases and subsequent demands on the health care system may also indirectly impact the availability and accessibility of routine and other health care resources, which is likely to be exacerbated if health care professionals continue to feel overwhelmed. A recent KFF/Washington Post survey indicates that 29% of health care workers have considered leaving their profession as a result of the pandemic (2021).

As mentioned previously, the state's seasonally adjusted unemployment rate has improved dramatically since July 2020. But other economic factors that were temporarily relieved by emergency measures, such as the national moratorium on evictions and deferment of student loan payments, have already expired or are scheduled to. These may have an impact on Delaware rates of poverty and other indicators of financial stability, which interact with health and wellbeing.

Snapshot:
Substance Use in Delaware

2020 Delaware School Survey
Reported Use of Selected Substances in the Past Year among Delaware 8th Grade Students (in percentages)

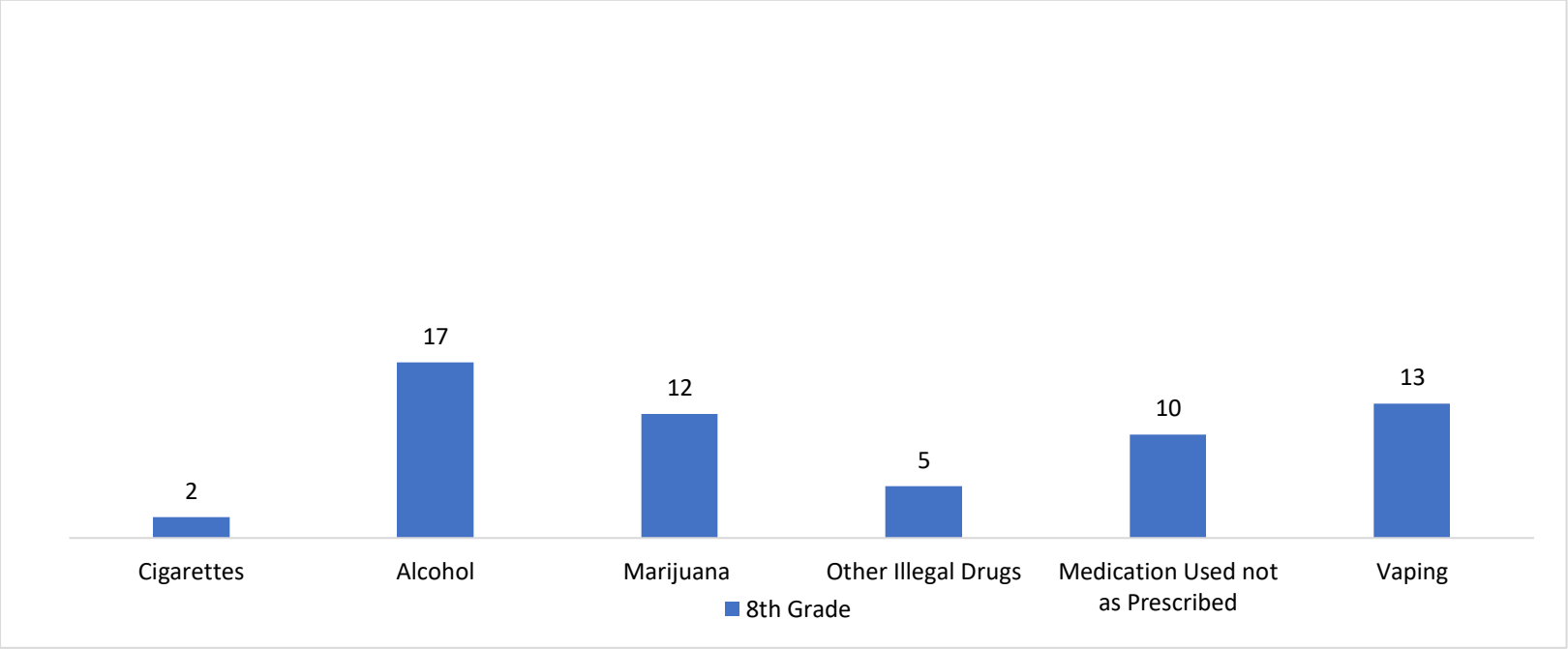


Figure 1: Selected substance use, past year, 8th grade

Notes: Medication used not as prescribed includes steroids, over-the-counter medication, prescription uppers (diet pills, Ritalin, Concerta, Adderall), downers (Xanax and other benzodiazepines), painkillers, and other prescription drugs used without a prescription or in a way other than prescribed.
Other illegal drugs include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware

Back to table of figures

2020 Delaware School Survey

Reported Use of Selected Substances in the Past 30 Days among Delaware 8th Grade Students (in percentages)

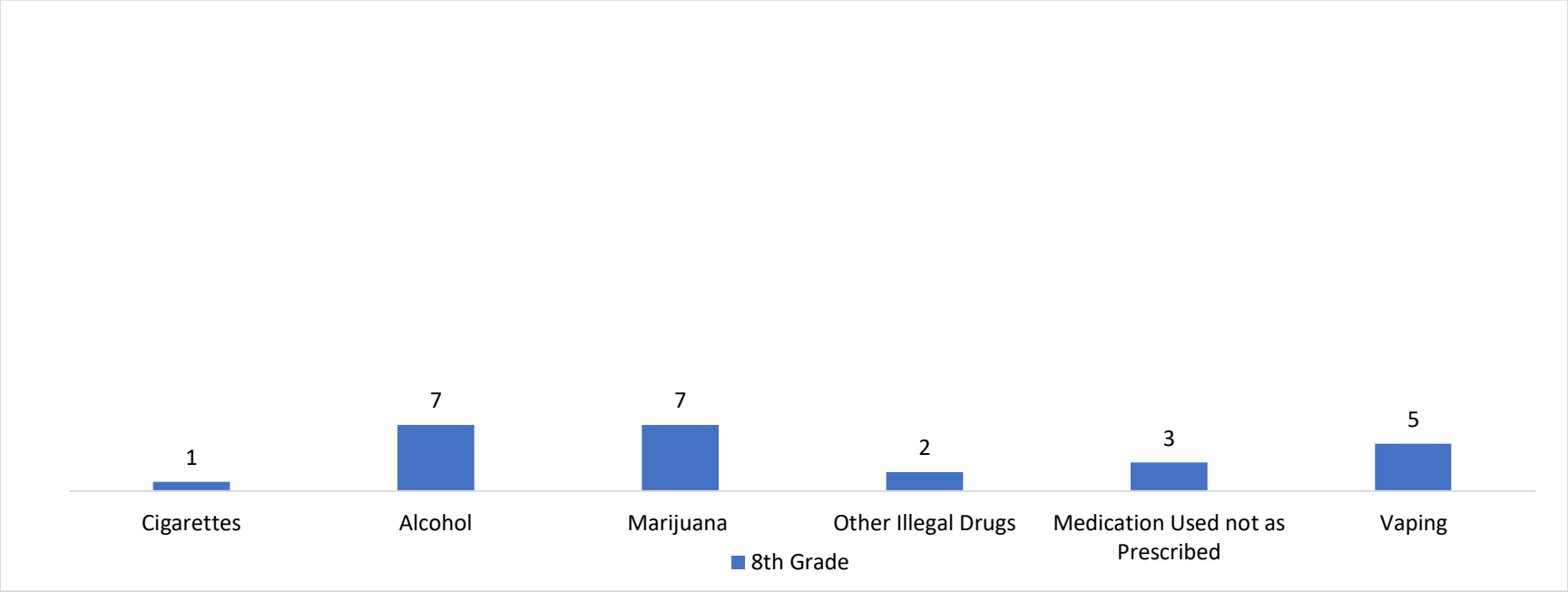


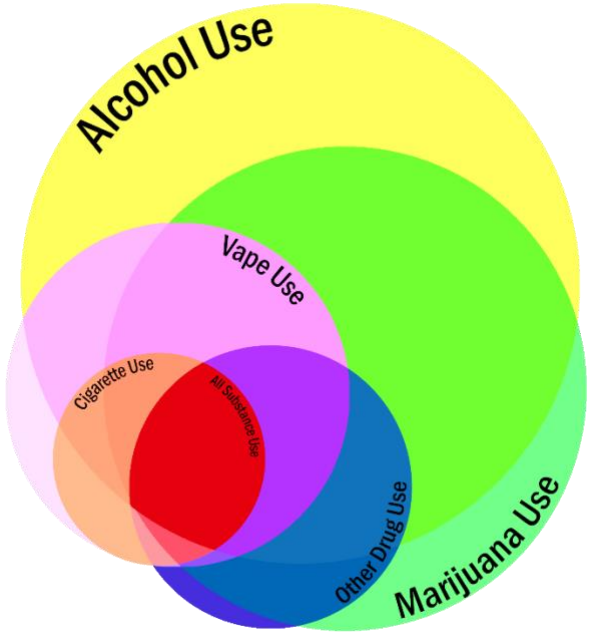
Figure 2: Selected substances used in past 30 days, 8th grade

Note: Past month cigarette use among 8th grade students is too small (n<30) to report here.
"Medication used not as prescribed" includes steroids, over-the-counter medication, prescription uppers (diet pills, Ritalin, Concerta, Adderall), downers (Xanax and other benzodiazepines), and painkillers.
"Other illegal drugs" include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2018 Delaware School Survey

Reported Polysubstance Use in the Past Year among Delaware 11th Grade Students



This Venn diagram illustrates the prevalence of past-year polysubstance use among 11th grade students in Delaware. Each circle has been scaled relative to the number of students who report using that substance in the past year, and the areas where circles overlap are accurate to the proportion of students who reported using multiple substances. Overall, 55% of students report using at least one substance in the past year, meaning that 45% of students did not report past-year substance use.

As in previous years, alcohol remains the most commonly used substance, with marijuana as the second most used substance. Most students who reported using a different substance were also using alcohol or marijuana, if not both. Also of note, every student who reported smoking cigarettes also reported the use of an e-cigarette or vaping device. Two percent of students reported using substances from all five categories of drugs here.

Substance	% Reporting Past-Year Use
Alcohol	45%
Marijuana	34%
E-cigarette/Vape	17%
Cigarettes	7%
At least one other drug	12%
All of the above categories	2%

Figure 3: Polysubstance use, past year, 11th graders

Note: This includes ecstasy, hallucinogens, steroids, over-the-counter drugs, amphetamines, crack, cocaine, heroin, synthetic marijuana, and/or any prescription medication used in ways other than prescribed.

Source: Center for Drug & Health Studies. (2018). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

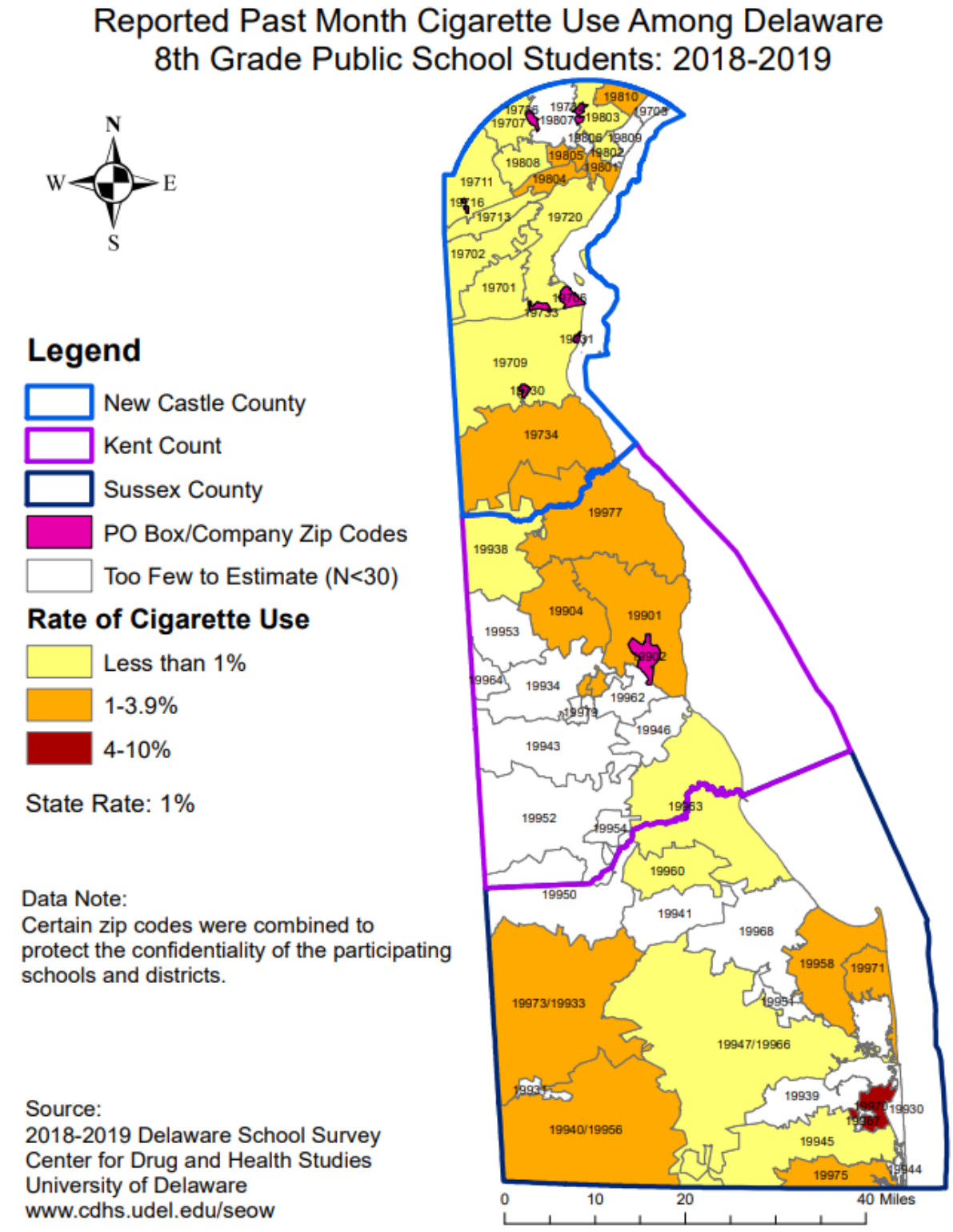


Figure 4: Map of past month cigarette use, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

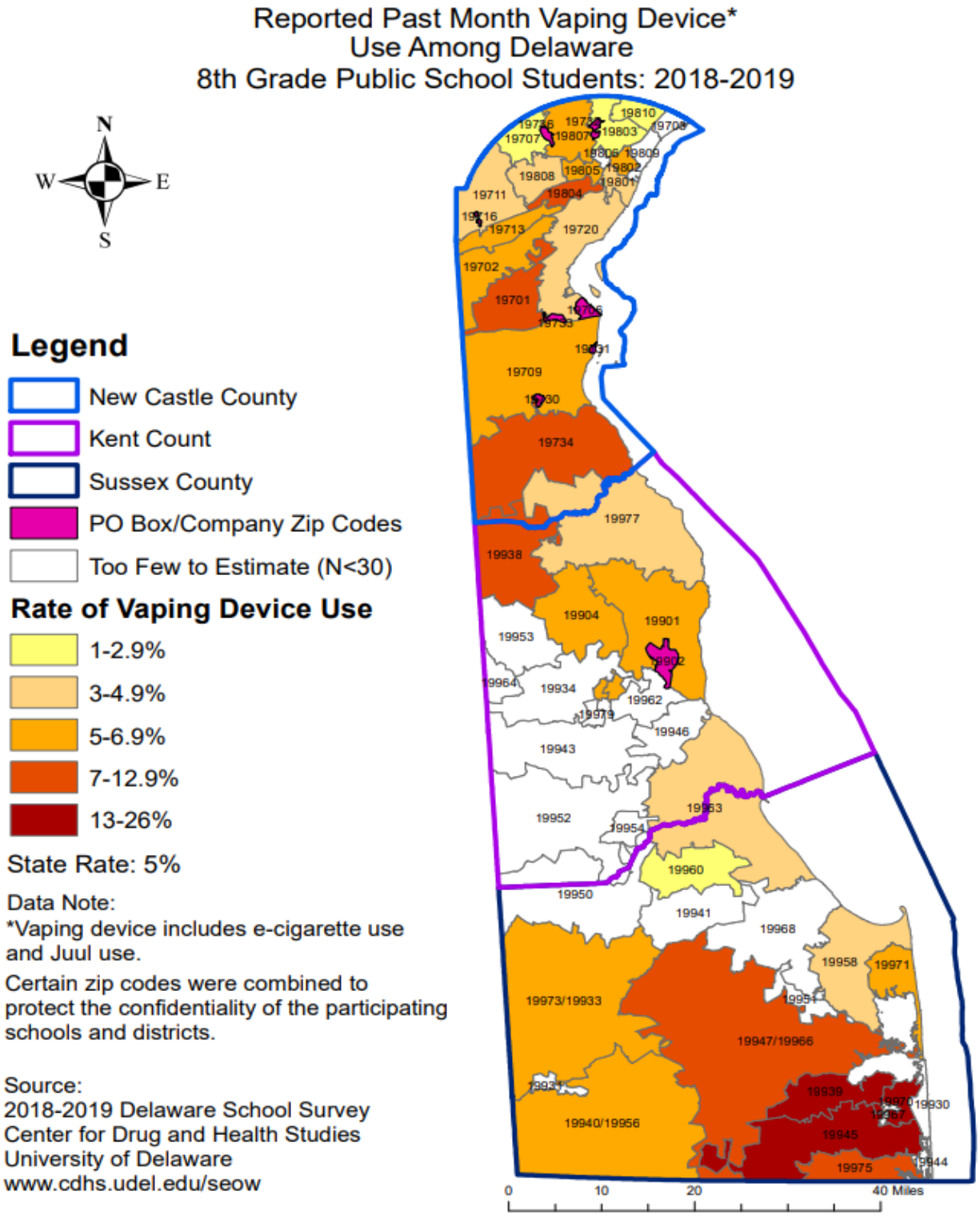


Figure 5: Map of past month vaping, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

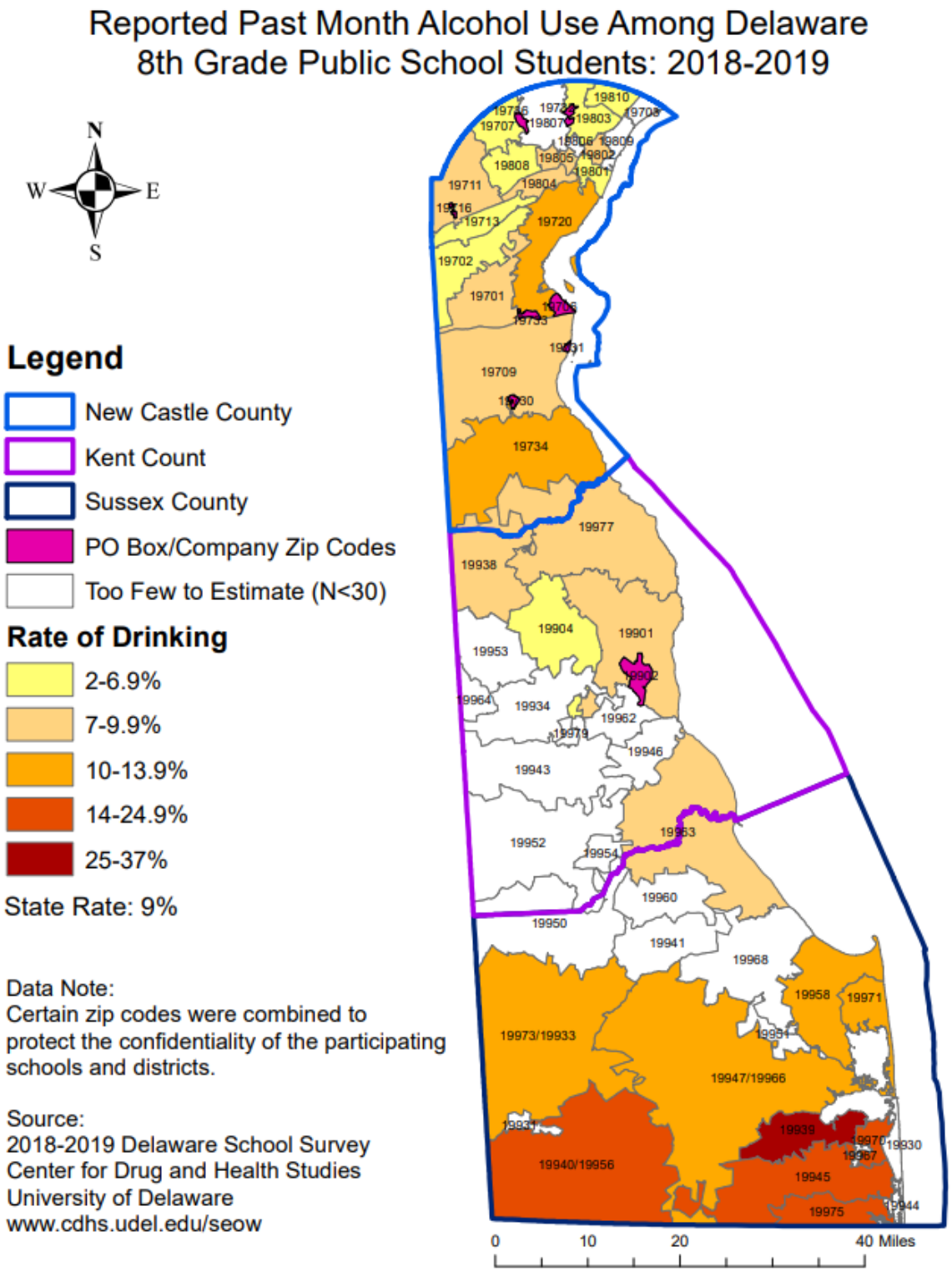


Figure 6: Map of past month alcohol use, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

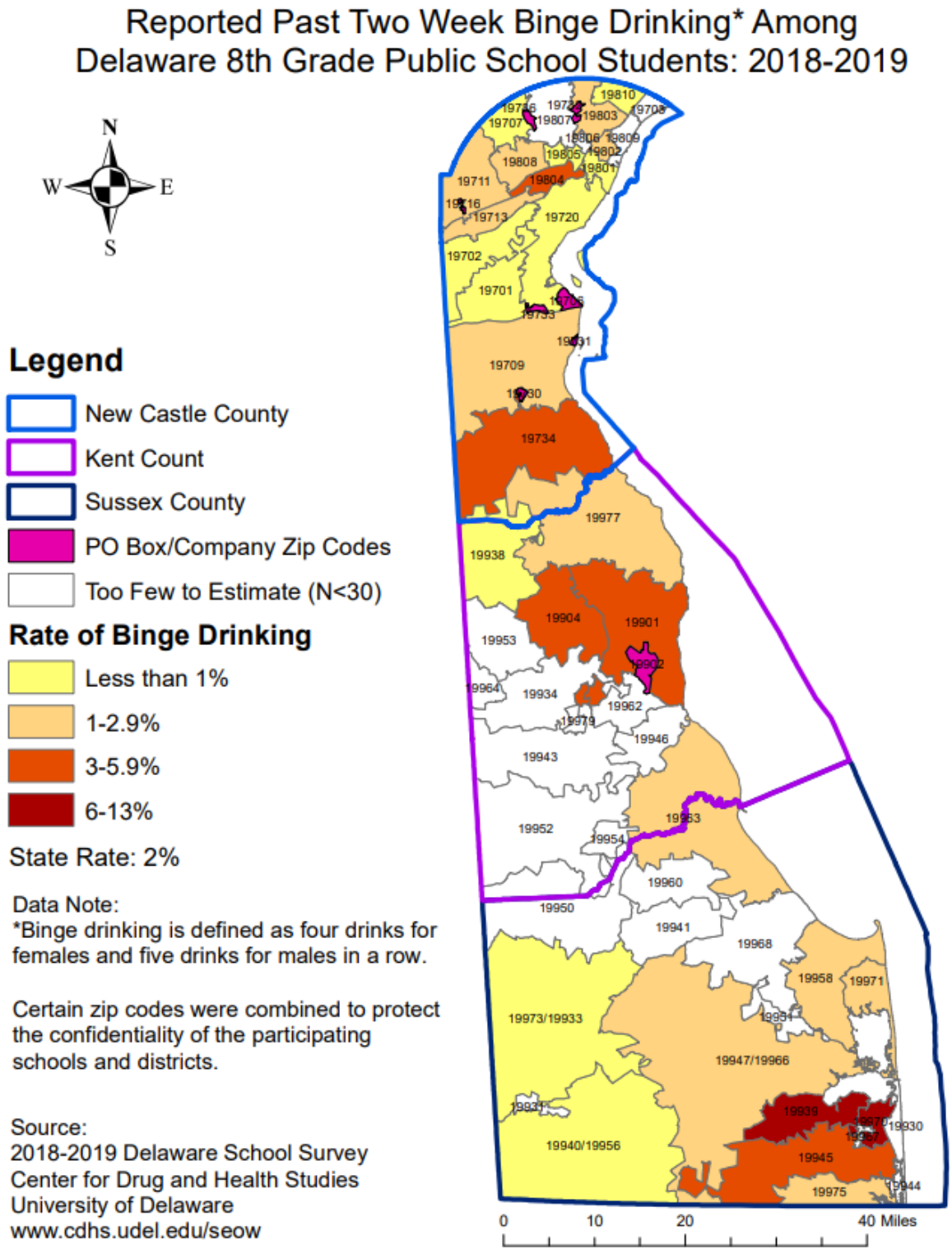


Figure 7: Map of binge drinking, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

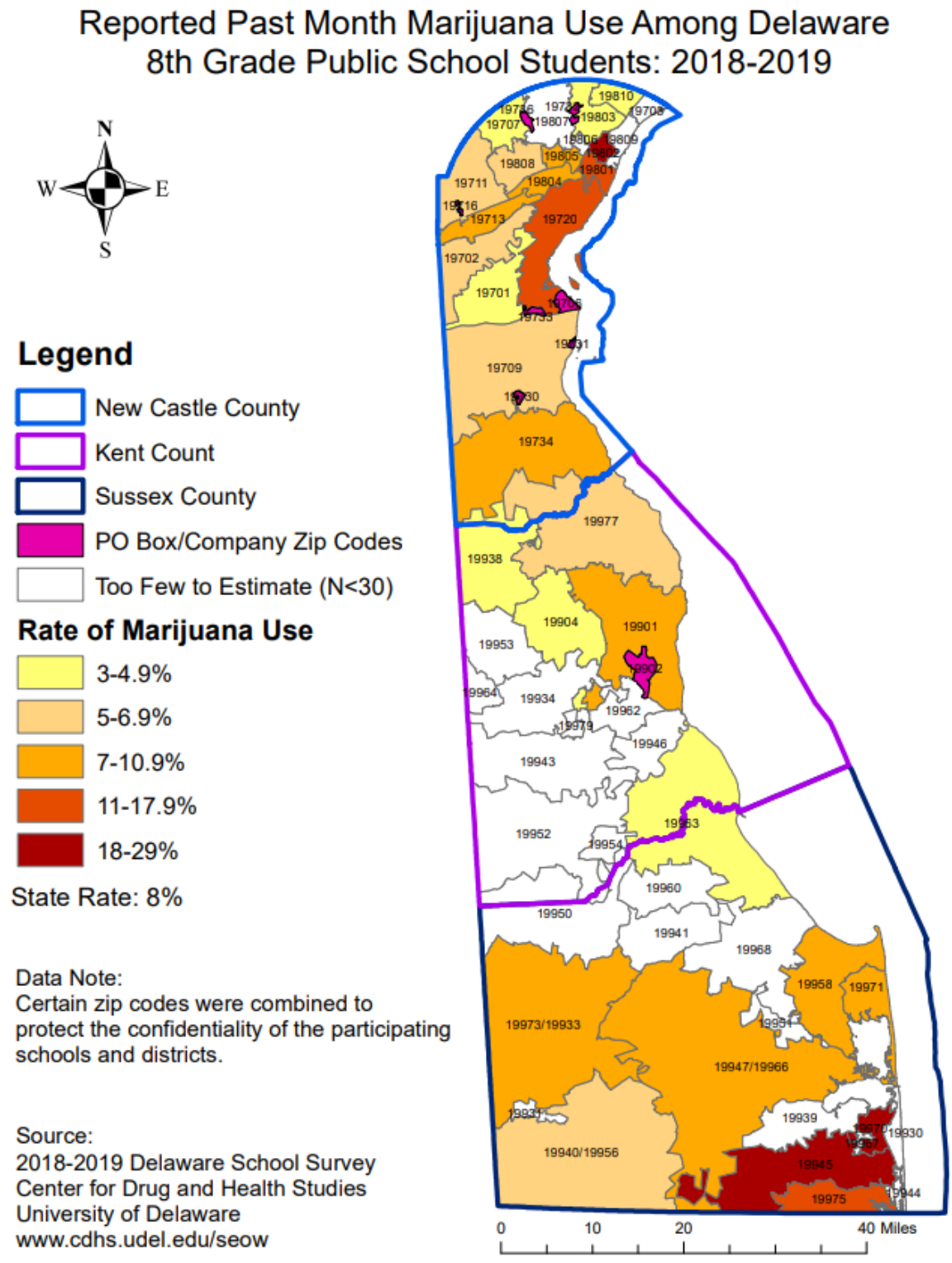


Figure 8: Map of past month marijuana use, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

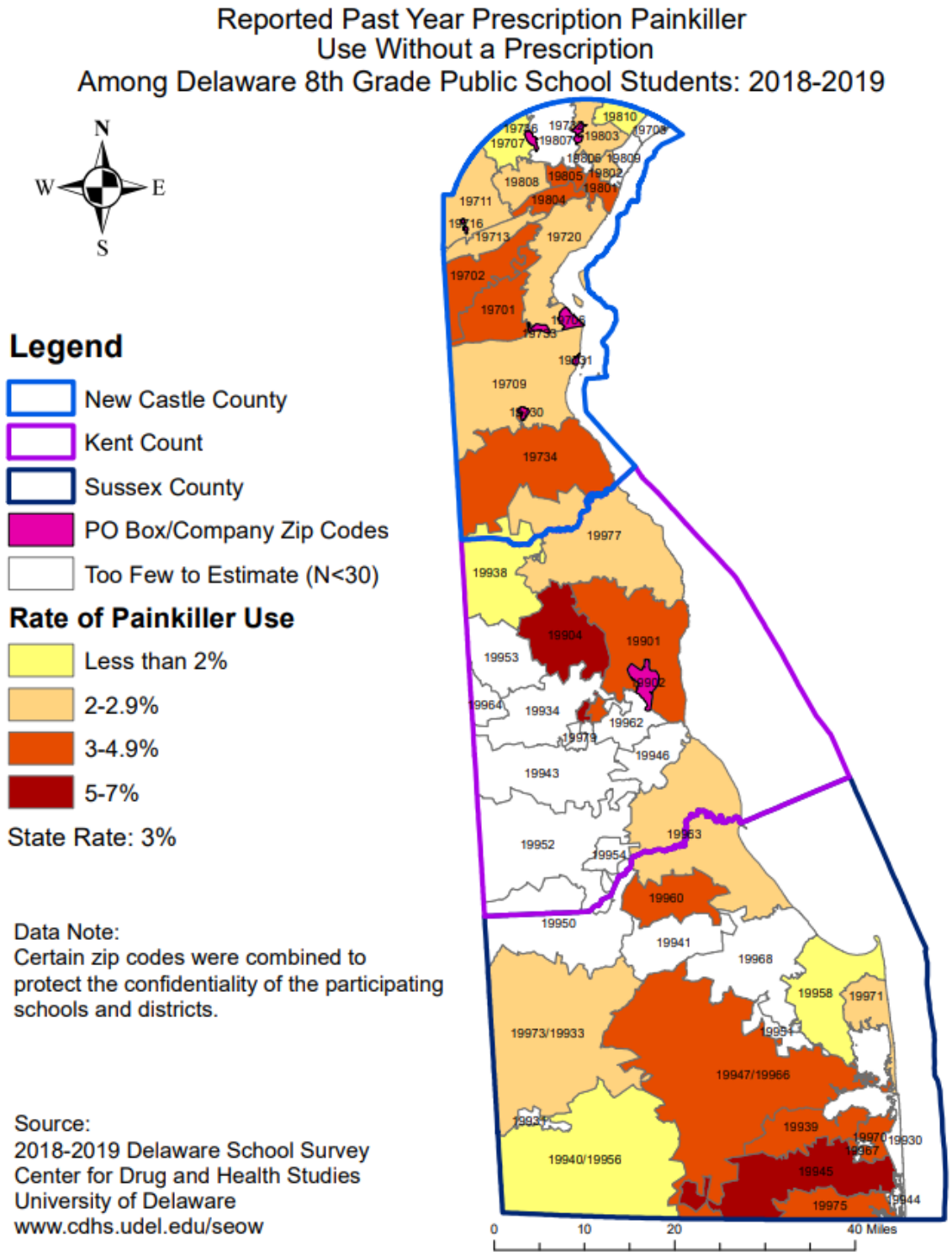


Figure 9: Map of past year prescription painkiller misuse, 8th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

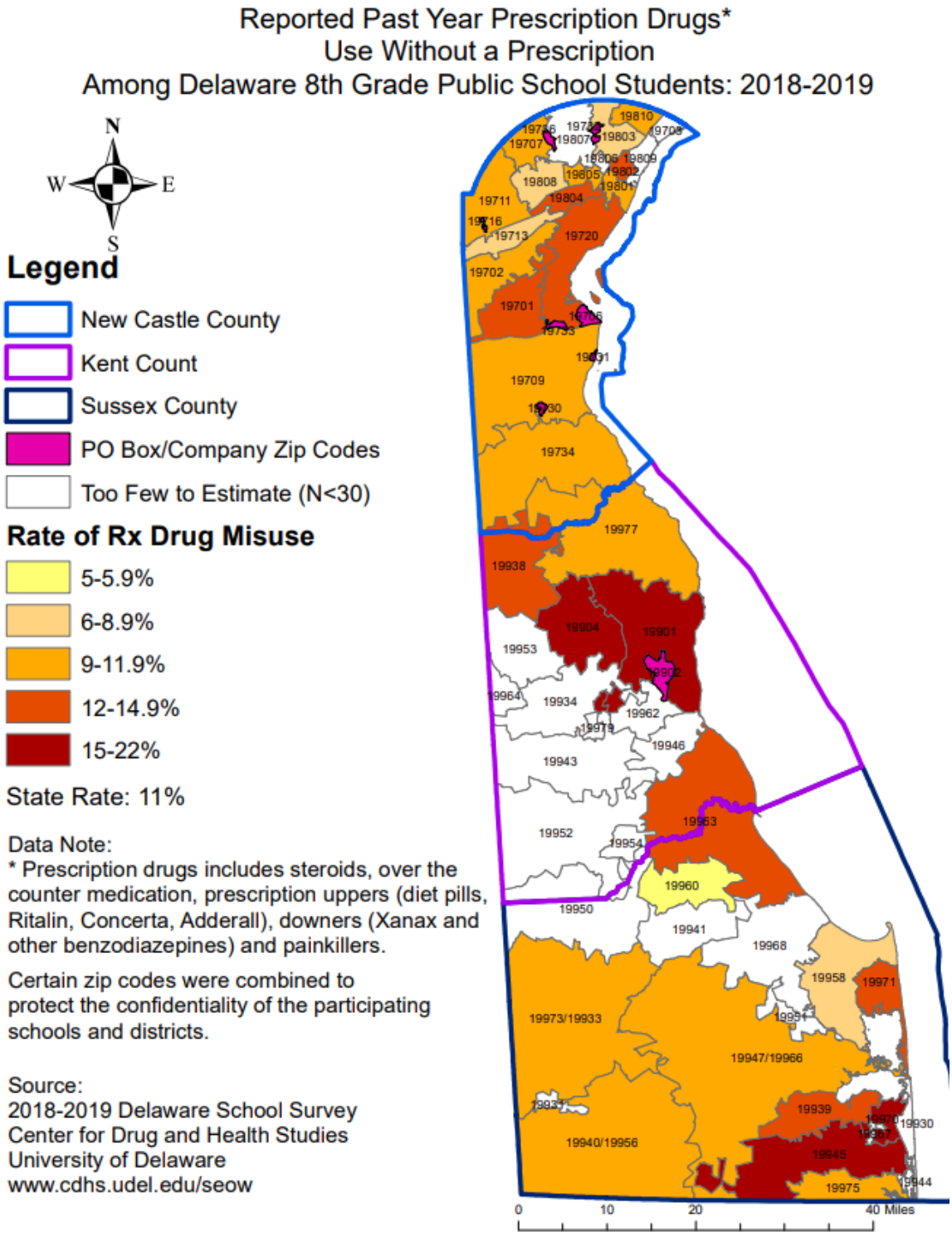


Figure 10: Map of past year prescription drug misuse, 8th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

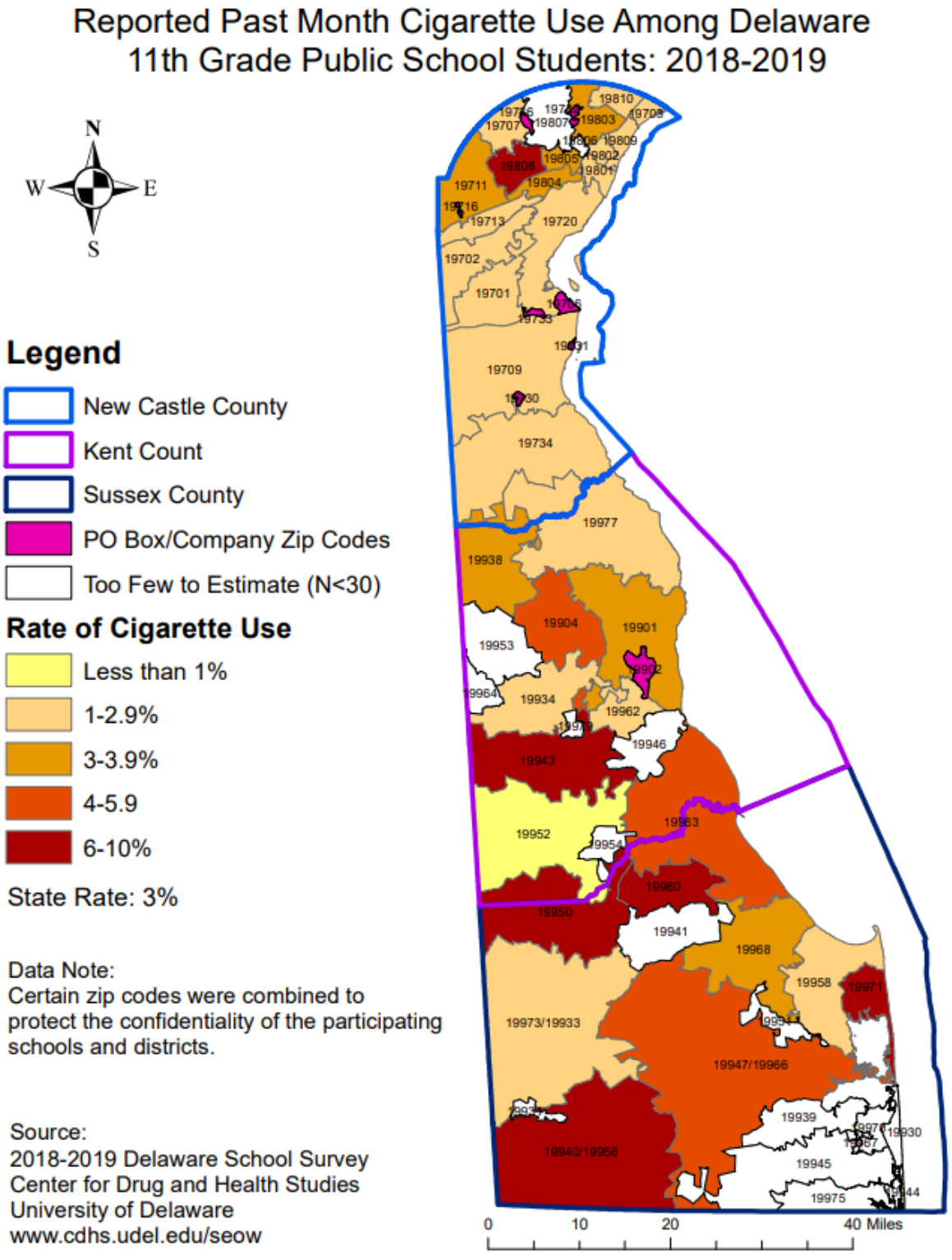


Figure 11: Map of past month cigarette use, 11th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

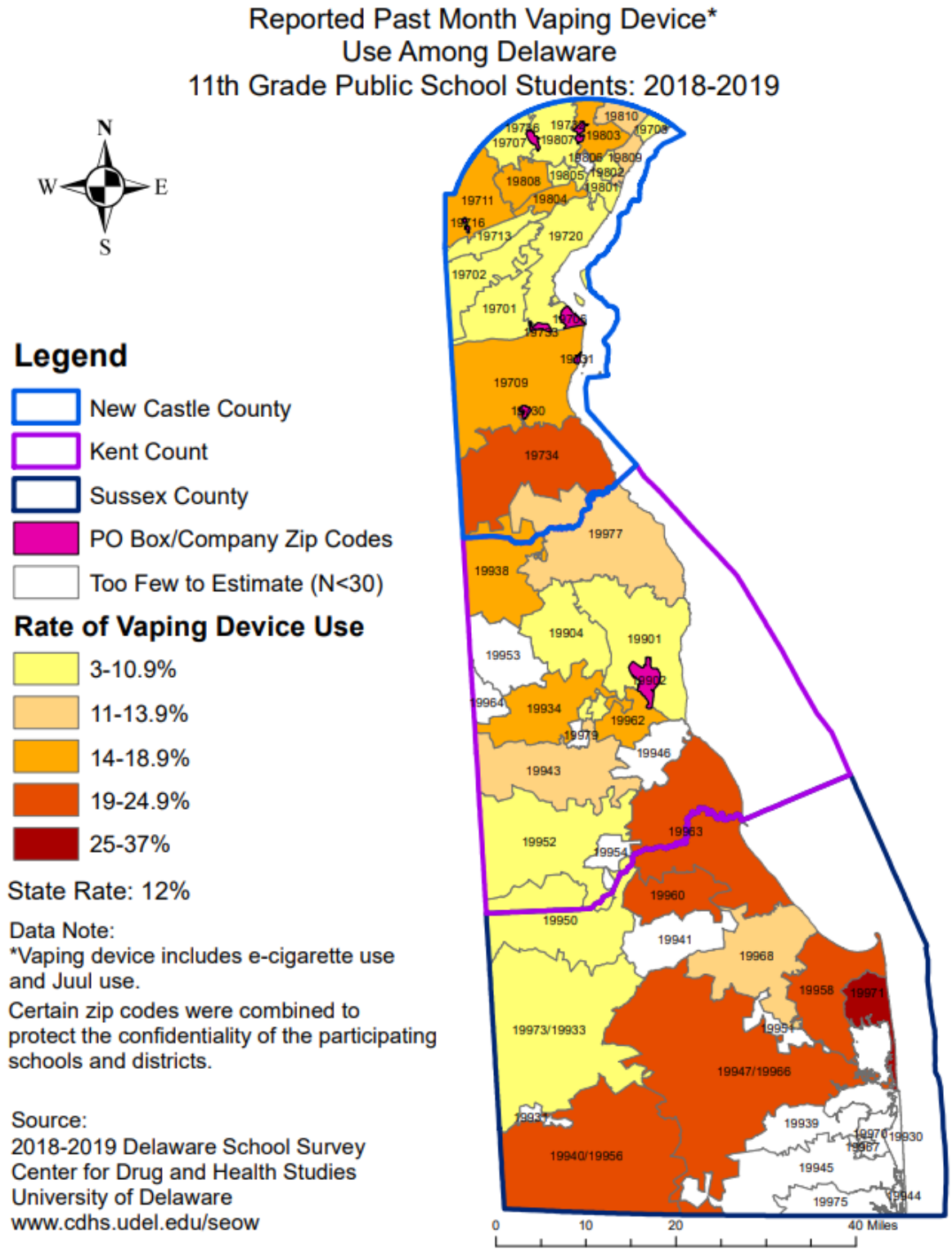


Figure 12: Map of past month vaping, 11th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

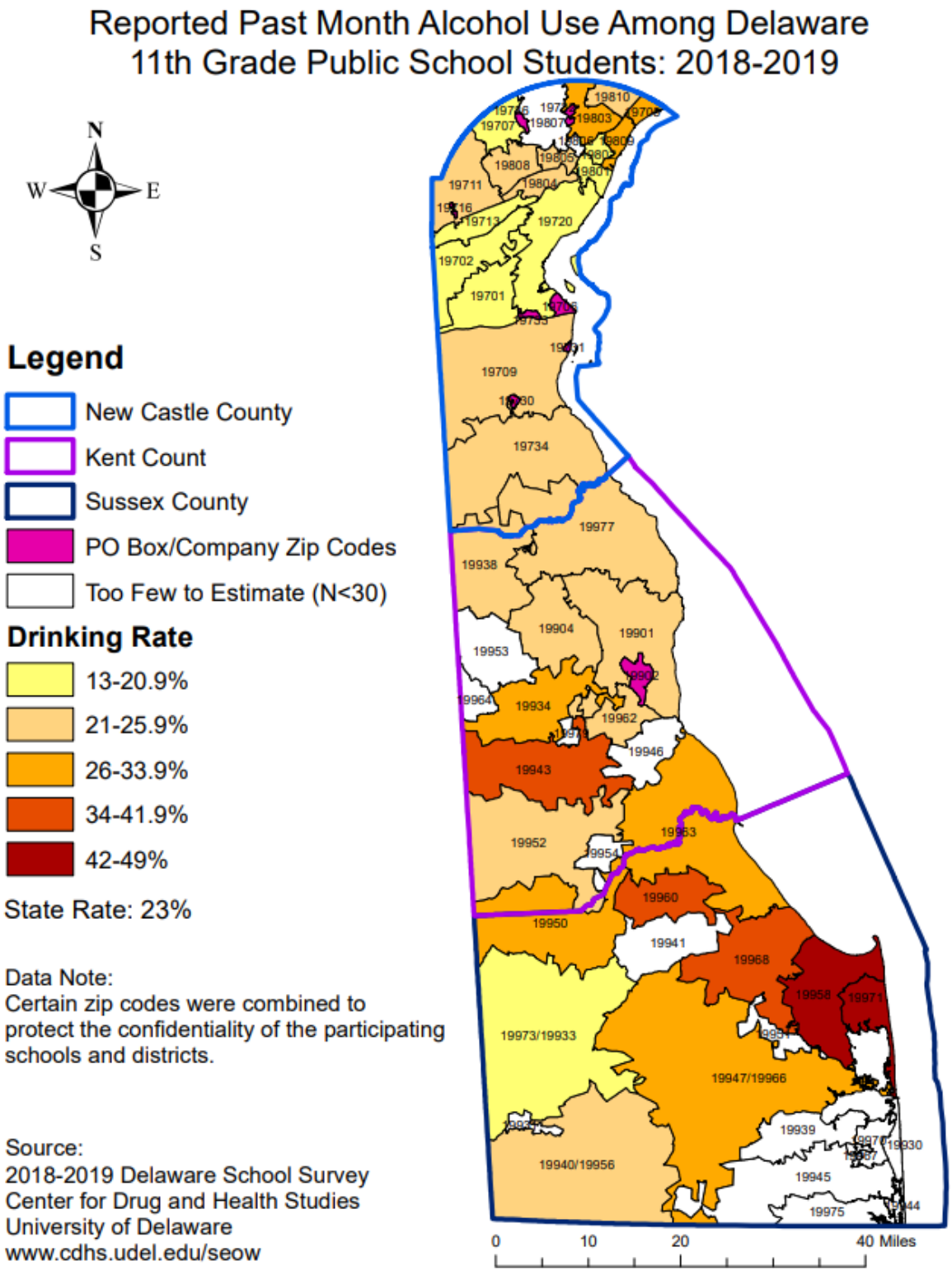


Figure 13: Map of past month alcohol use, 11th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

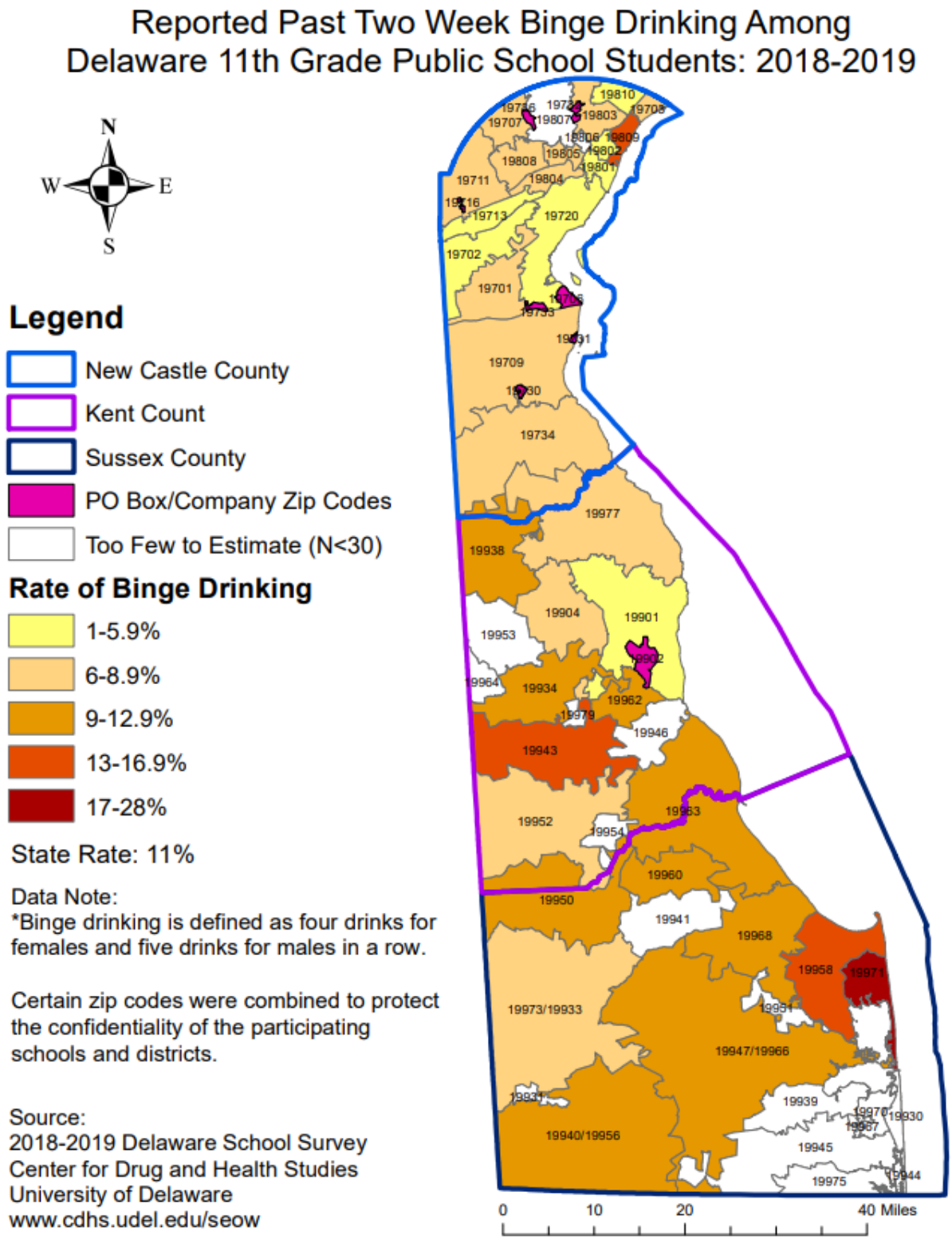


Figure 14: Map of binge drinking, 11th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

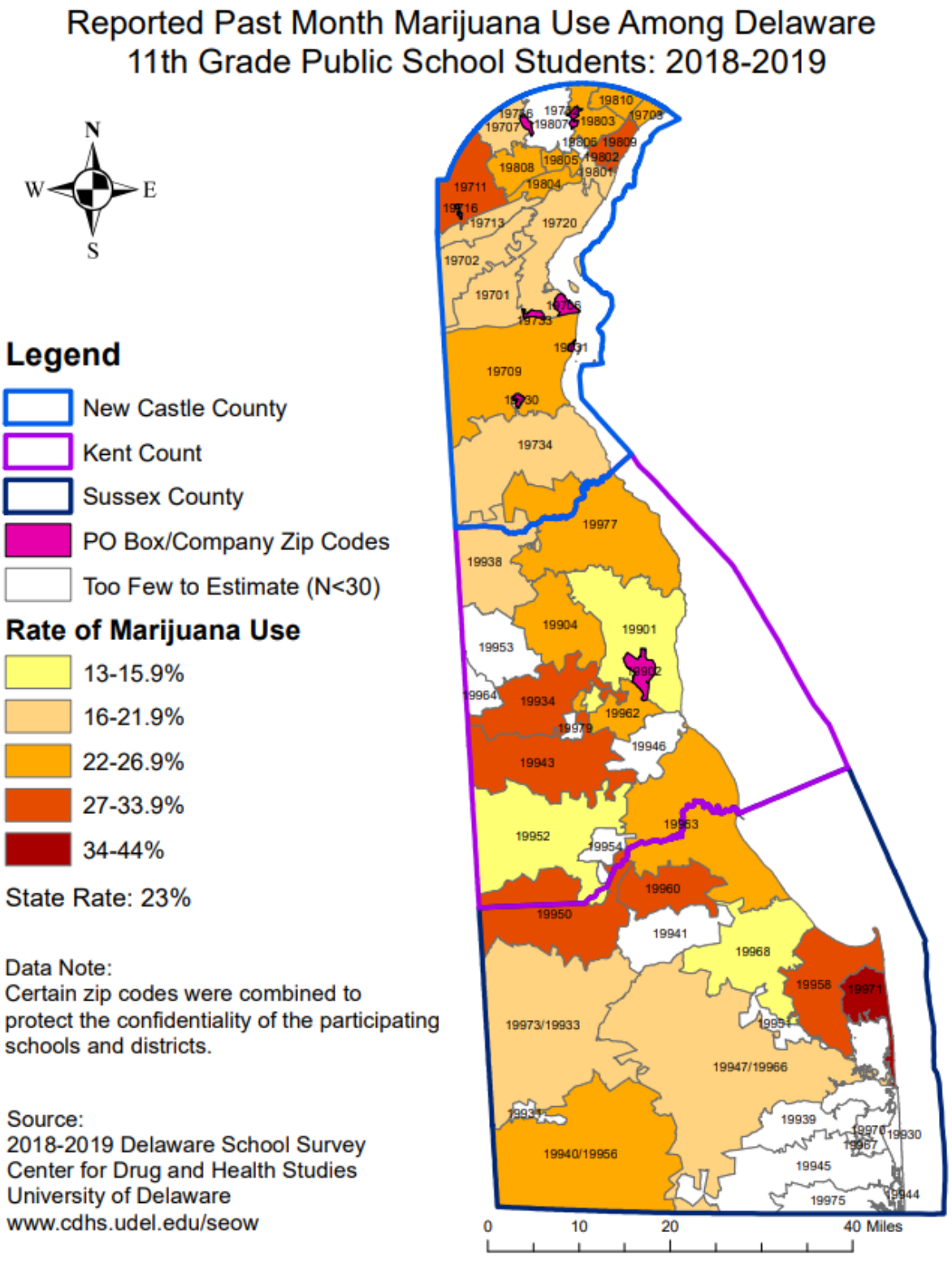


Figure 15: Map of past month marijuana use, 11th grade

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

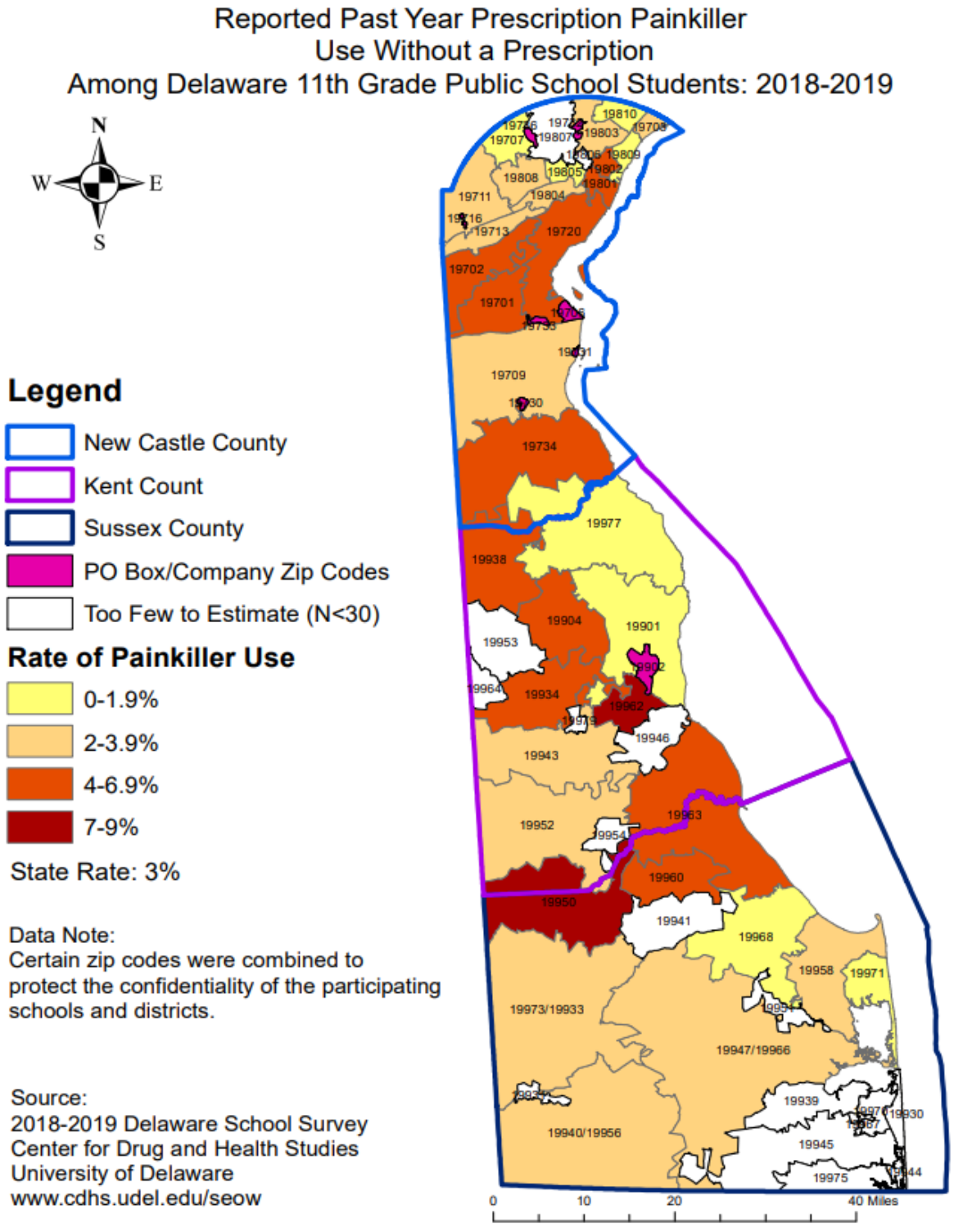


Figure 16: Map of past year prescription painkiller misuse, 11th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

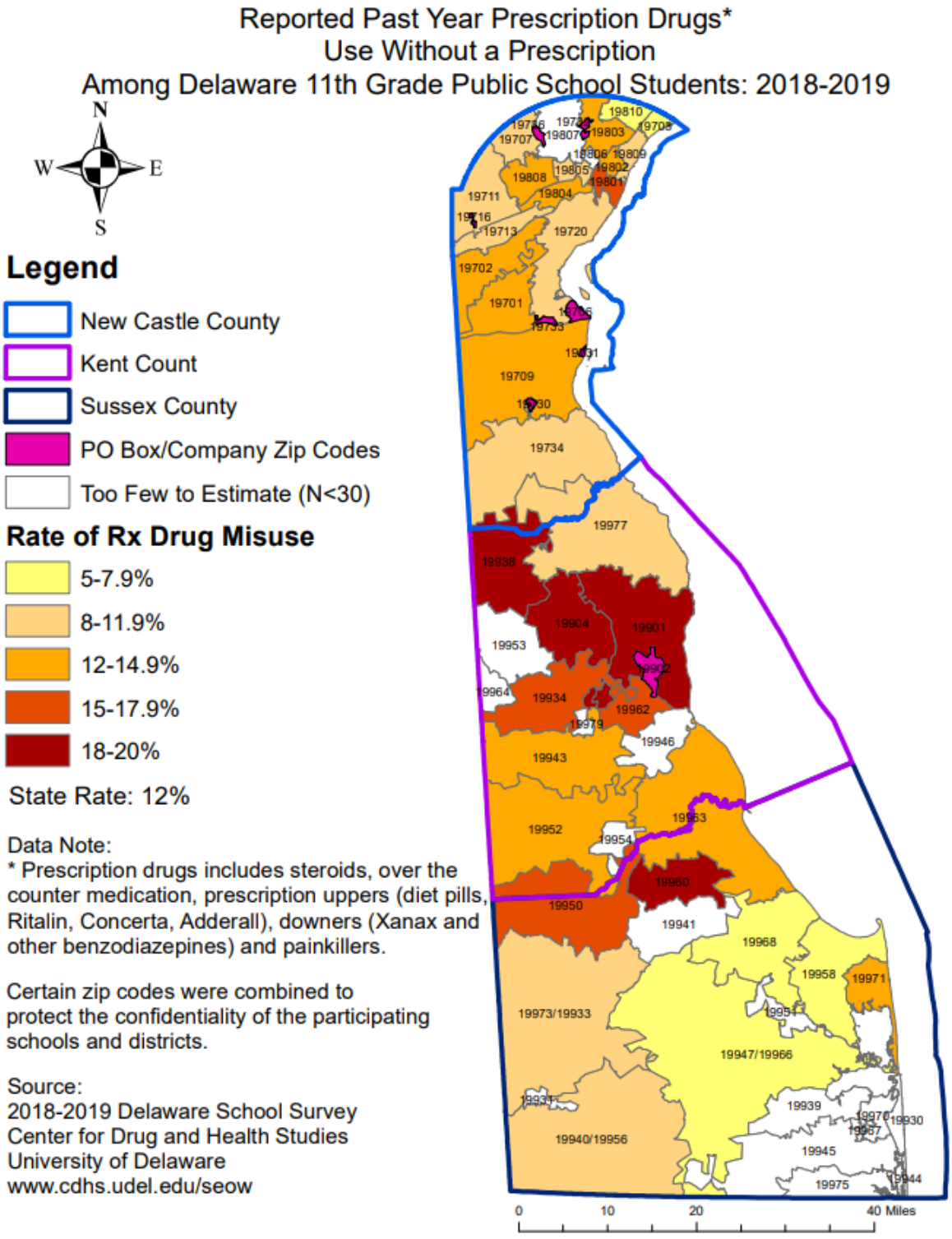


Figure 17: Map of past year prescription drug misuse, 11th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2. **Tobacco and Electronic Cigarettes (Vaping)**

National Overview

Cigarette use has declined for youth and adults in Delaware over the past 20 years.

Of concern, the rate of Delaware youth who perceive great risk of harm from heavy smoking is also declining.

Delaware 8th graders report higher rates of vaping in the past month (5%) than smoking cigarettes (1%).

More than 50 years ago, the U.S. surgeon general released a comprehensive report documenting strong evidence that linked cigarette smoking to lung cancer and other conditions. In addition to cancers, tobacco use has been linked to heart and respiratory diseases, fetal distress, and other dangerous health conditions. Over the decades, increased knowledge of the risks of smoking has had a positive impact; however, tobacco use remains an issue nationally and locally. Despite significant declines in tobacco use, more than 16 million Americans have at least one disease caused by smoking, which is associated with approximately $170 billion of direct medical costs annually (Centers for Disease Control and Prevention [CDC], 2020). Yearly, almost one in five deaths in the U.S. are linked to cigarettes, and these deaths are entirely preventable.

Nationwide, there has been a decrease in the use of tobacco products over the past several decades. In 2017, roughly 14% of adults in the U.S. reported being current cigarette smokers, reflecting a 67% decrease in cigarette use since 1965 (Wang, Asman, Gentzke, et al., 2018). Among adults who smoke, more than two-thirds report that they want to quit, although rates of quitting decrease with age (Babb, Malarcher, Schauer, Asman, & Jamal, 2017). High school respondents to the National Youth Risk Behavior Survey (NYRBS) reported current smoking at 27.5% in 1991 and 6% in 2019 (CDC, 2020). During that same time period, the number of high school youth who reported ever trying cigarette smoking declined from approximately 70% of respondents to 24.1% (CDC, 2020). The CDC reports that the rate of decline has slowed in recent years. In addition, sharp disparities in use between populations are apparent (CDC, n.d.).

Increasingly, youth and adults are using electronic cigarettes or “vaping” in place of, or in addition to, cigarettes. Nationally, youth vape at a greater rate than they use any other tobacco product, including cigarettes (Jamal et al., 2017). A 2016 surgeon general’s report estimated a 900% increase in youth use of e-cigarettes between 2011-2015. One analysis of results from the 2016 National Youth Tobacco Survey found that the three main reasons middle and high school students give for using e-cigarettes are a friend or family member used them, there are multiple flavor options, and there is a perception of lower risk (Tsai et al., 2018). While e-cigarettes are marketed as less dangerous than regular cigarettes, they still contain nicotine, aerosol, and additional chemicals that may be toxic to the health of the user (Office of the Surgeon General, 2016). Vaping has also been linked to a greater risk of using other tobacco

products, including regular cigarettes. The health impacts of e-cigarettes are still being studied, and some risks may not be known at this time. The use of e-cigarettes is particularly problematic for youth: nicotine is addictive and has been shown to interfere with healthy brain development during adolescence and young adulthood. E-cigarette devices can also be used for marijuana and other illegal substances (Office of the Surgeon General, 2016). Newer products, such as JUUL (a brand featuring small devices that look like flash drives and thus are deceptive in appearance), seem to be specifically designed to appeal to youth. The company Juul Labs, responsible for creating and marketing Juul vaping devices, has been the subject of lawsuits filed by several states claiming that their product was marketed to underage users. In Summer 2021, the first of these lawsuits was settled in North Carolina and the company was required to pay $40 million as well as drastically change the advertising and sale of its products (Langmaid, 2021).

Delaware Overview

According to the CDC, 16.5% of adults in Delaware smoked cigarettes in 2018 and there are approximately 1,400 related deaths reported each year (CDC, 2020). In 2009, an estimated $532 million was spent throughout the state on healthcare costs related to smoking. Efforts to control and prevent tobacco use also have high costs; the CDC provided $768K to the State of Delaware for tobacco prevention and control activities in FY2019 (CDC, 2020). If current tobacco usage trends stay stable, the CDC projects that approximately 17,000 Delawareans who were minors in 2012 will die from a smoking-related illness at some point in their lives (Office of Surgeon General, 2014, p. 693).

Mirroring national trends, data from five major survey sources (Behavioral Risk Factor Surveillance System, National Survey of Drug Use and Health, Youth Risk Behavior Survey, Delaware School Survey, and Youth Tobacco Survey) illustrate a steady decline in cigarette use among Delaware residents since the late 1990s. Twenty years ago, more than a third of 11th graders reported regularly using cigarettes; in 2019, approximately 3% of 11th graders reported currently smoking cigarettes (Delaware School Survey [DSS], 2019). The average age of onset for cigarette use is 11.8 years among 8th who responded to the 2020 DSS. Adult rates have declined as well; self-reports of past month smoking among Delaware adults decreased from 21.8% in 2011 compared to 15.9% in 2019 (Behavioral Risk Factor Surveillance System [BRFSS], 2019). The BRFSS also indicates that smoking tends to be most common among the 25-34 year age group and is associated with lower levels of educational attainment (2019).

Although rates of cigarette use have declined steadily over the past 20 years among Delaware youth, 6% of Delaware middle school students report that they have either smoked cigarettes, cigars, used smokeless tobacco, or an electronic vaping product within the past month (Delaware Middle School Youth Risk Behavior Survey [YRBS], 2019). Equally concerning, there is a 10% one-year drop (from 56% to 46%) in the rate of 8th graders who perceive there is great

risk from smoking a pack of cigarettes per day (DSS, 2019 and 2020). While there has been variation in this indicator over the years, this is the first time it has dipped to below half of all 8th graders in 20 years. Perception of risk and use of all tobacco and vaping products should continue to be monitored.

While the decline in cigarette use in Delaware is promising, there has been a troubling concern over the past decade in the use of e-cigarettes or vaping devices for both youth and adults. A preference for vaping over cigarettes may be due to individuals perceiving these products as safer alternatives to cigarettes. However, YRBS trend data indicates that the rate of vaping has steadily declined from 8.14% in 2015 to 4.6% in 2019 among Delaware middle school students. This will be an important indicator to watch in the future and may be related to collaborative efforts to reduce vaping. (For a detailed profile of vaping among Delaware youth and a discussion of statewide prevention efforts compiled by SEOW stakeholders, please see the *Delaware Journal of Public Health August 2020*.)

Data in Action: E-cigarette Use or Vaping During the COVID-19

E-cigarettes can harm young, developing brains and impact learning, memory, and attention due to nicotine exposure (Office of the Surgeon General, 2016). Now with the ongoing COVID-19 pandemic, there are additional reasons why use of e-cigarettes and vaping may lead to health concerns among adolescents. Currently, there are no studies in the U.S. that provide evidence concerning the direct relationship between e-cigarette use and COVID-19 related outcomes. However, a recent study found that e-cigarette use among youth is associated with an increased likelihood of experiencing COVID-19 (Gaiha, Cheng, and Halpern-Felsher, 2020). In that survey, youth who had ever used e-cigarettes were five times as likely to experience COVID-19, and those who vaped and used combustible tobacco products were at an even greater risk.

Vaping exposes an individual to nicotine and other chemicals (e.g., tetrahydrocannabinol, Vitamin E acetate) that negatively affect lung function (Hamberger and Halpern-Felsher, 2020) and increase the risk of heart disease and respiratory infections. Additionally, e-cigarette users often share devices with one another and a primary concern of spreading COVID-19 is through repeated touching of an individual's face by their hands (Berlin et al., 2020) and spreading infection through saliva. While it is possible that stay-at-home orders may have reduced the likelihood of sharing vaping devices with others, many students have now returned to in-school learning.

Although many proponents of vaping argue that use of e-cigarettes and vaping devices have helped them to quit or avoid using combustible cigarettes, experts caution that these products are not a safe alternative, especially when considering related lung injuries. People who do not currently use e-cigarettes or vape are strongly discouraged from starting, and for people who wish to quit, resources are available through the Healthy Delaware's online toolkit.

National Survey on Drug Use and Health
Past-Month Tobacco and Cigarette Use and Perceptions of Great Risk in Delaware by Age Group, 2018-2019 (annual average percentages)

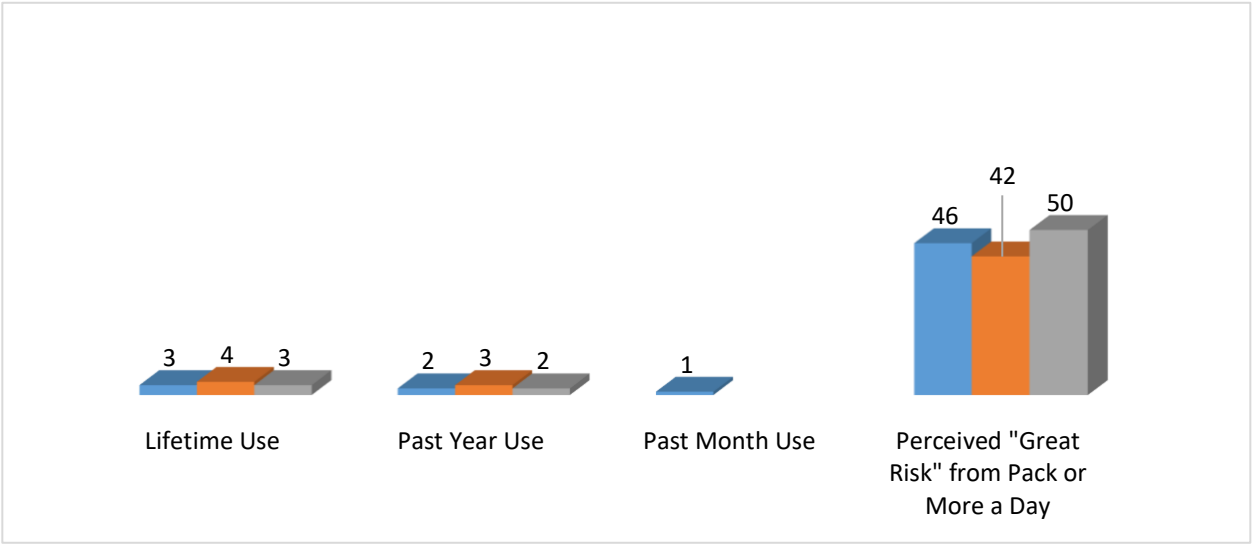
Rates of past month use and perceptions of great risk in Delaware by age group: annual average percentages based on 2018-2019 NSDUH [a]				
Measure	**Total 12 or Older**	**AGE GROUP**		
		12-17	**18-25**	**26 or Older**
Tobacco products				
Past month tobacco product use [b]	22.60	4.04	25.59	24.12
Past month cigarette use	17.46	1.93	17.84	19.03
Perceived great risk of smoking one or more packs of cigarettes per day	71.81	64.68	67.31	73.19

Figure 18: Tobacco/cigarette use & perceptions of great risk

Notes:
[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.
[b] Tobacco products include cigarettes, smokeless tobacco (i.e., snuff, dip, chewing tobacco, or snus), cigars, or pipe tobacco.
Source: "National Survey on Drug Use and Health: Comparisons of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

2020 Delaware School Survey
Cigarette Use among Delaware 8th Graders
(in percentages)



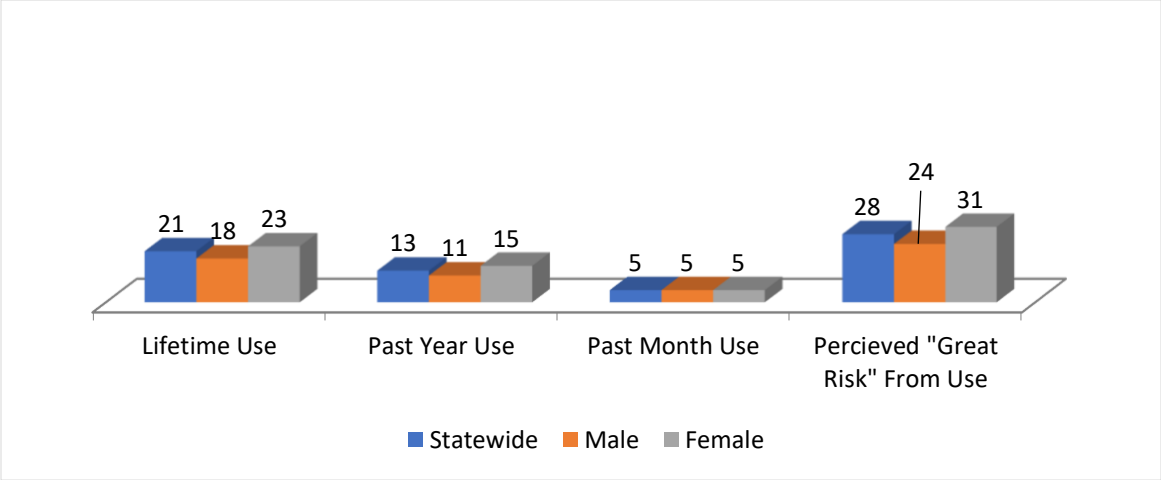
	Lifetime Use	Past Year Use	Past Month Use	Perceived "Great Risk" from Pack or More a Day
Statewide	3	2	1	46
Male	4*	3*	-	42
Female	3*	2*	-	50

Figure 19: Cigarette use, 8th graders

Note:
"-" indicates that the prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
* Estimates were not statistically significant at the p<.05 level.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey
Electronic Cigarette/Vaping Device Use among Delaware 8th Graders (in percentages)



	Lifetime Use	Past Year Use	Past Month Use	Perceived "Great Risk" from Use
Statewide	21	13	5	28
Male	18	11	5*	24
Female	23	15	5*	31

Figure 20: Electronic cigarette/vaping device use, 8th graders

Note:
* Estimates were not statistically significant at the p<.05 level.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey

Average Age of Onset for Cigarette Use

8th Grade	11th Grade
11.8 years	-

Figure 21: Average age of onset[1] for cigarette use, 8th and 11th graders[2]

Note:
[1] Average age of onset calculated among students who report ever smoking a cigarette
[2] Delaware School Survey data was unavailable in 2020 for 11th grade students
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

2019 Middle School Youth Risk Behavior Survey

Students Who Currently Smoked Cigarettes* 2007-2019 (In Percentages)

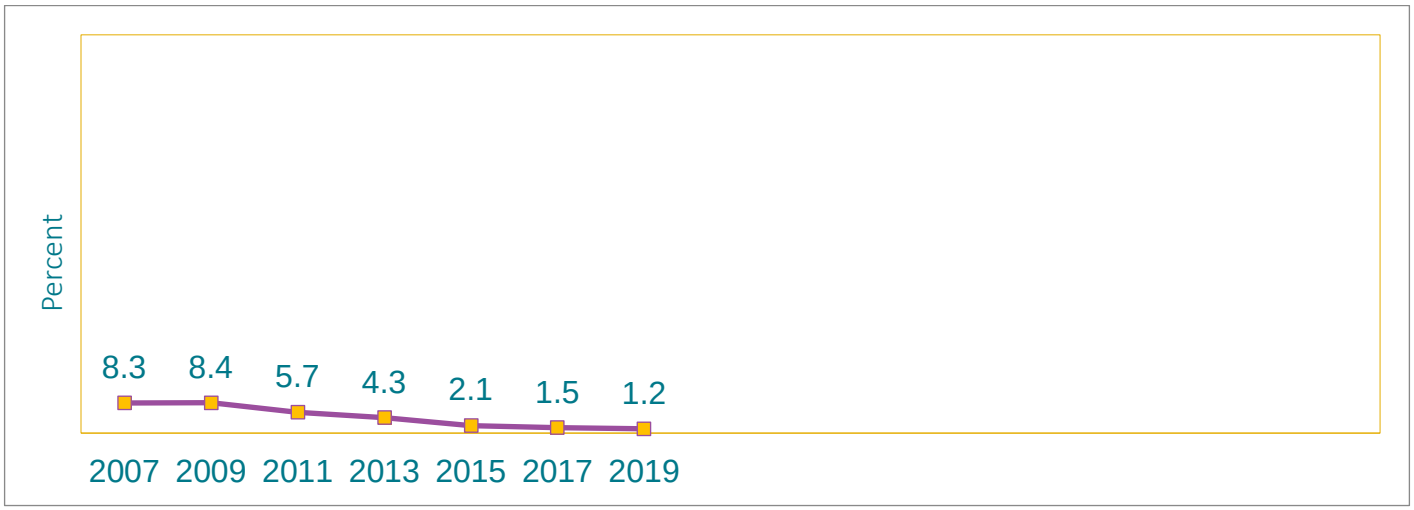


Figure 22: Trends in current cigarette use, MS

Notes:
*On at least 1 day during the 30 days before the survey
Decreased 2007-2019, decreased 2007-2011, decreased 2011-2019 [Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade ($p < 0.05$). Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).]
This graph contains weighted results.
Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

2019 Middle School Youth Risk Behavior Survey
Students Who Currently Used Vapor Products* 2015-2019 (in percentages)

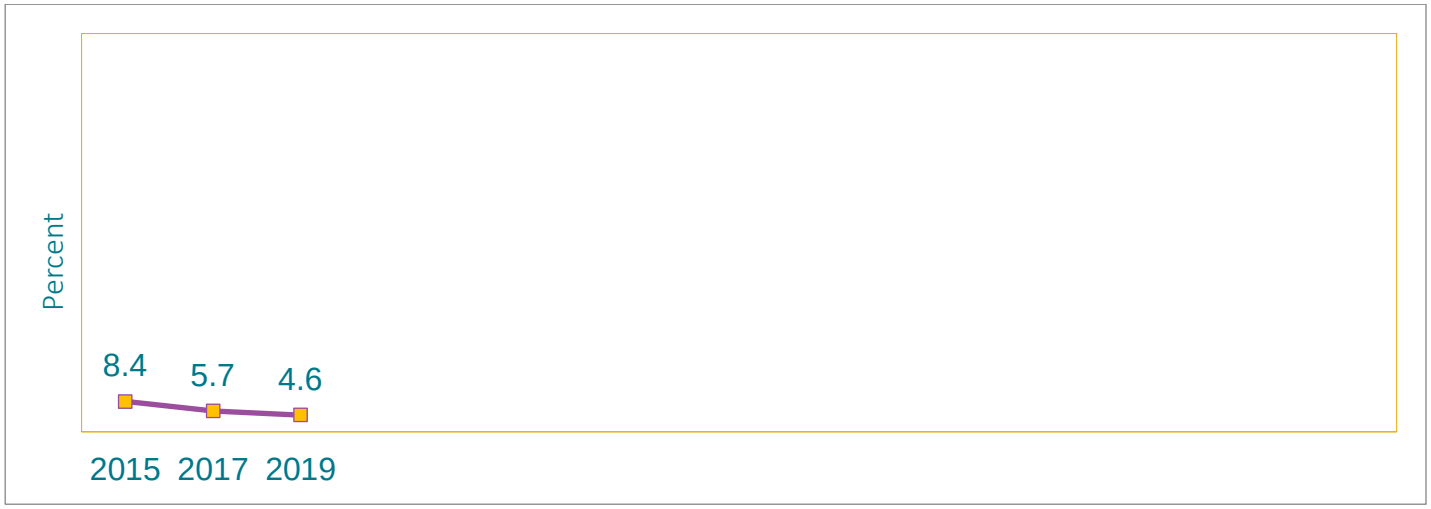


Figure 23: Trends in current vaping, MS

Notes:
*On at least 1 day during the 30 days before the survey
Decreased 2015-2019 [Based on linear trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade ($p < 0.05$).] This graph contains weighted results.
.

Students Who Currently Smoked Cigarettes or Cigars or Use Smokeless Tobacco or Electronic Vapor Products* (in percentages)

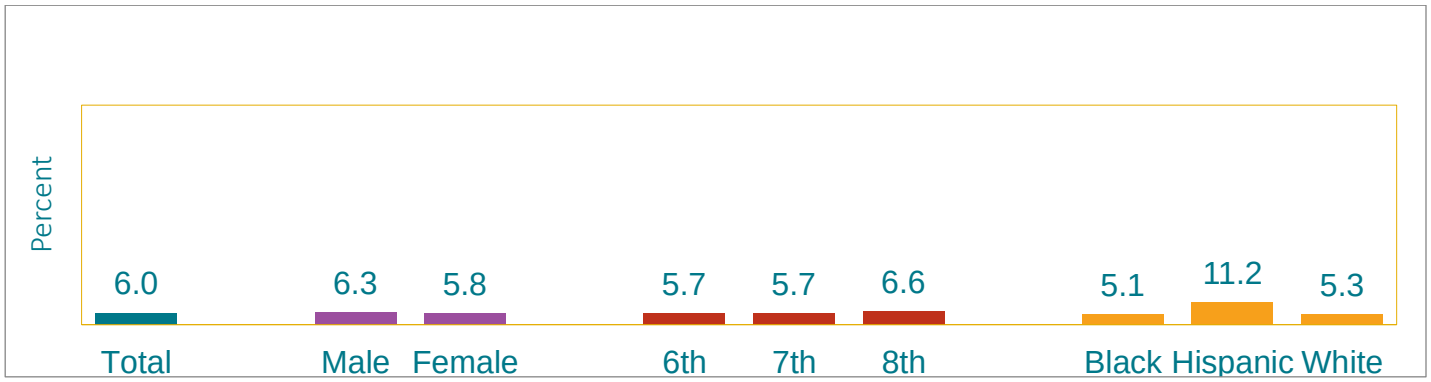


Figure 24: Current use of cigarettes, cigars, smokeless tobacco, or vape products, MS

Notes:
*On at least 1 day during the 30 days before the survey
†H > B, H > W (Based on t-test analysis, $p < 0.05$.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
This graph contains weighted results.
Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

Delaware Behavior Risk Factor Surveillance System (BRFSS)

Adult Cigarette Smoking by Sex, 2019

Sex	Current Smokers	Smoke Everyday	Smoke Some Days
Overall	15.9%	11.0%	4.9%
Male	15.8%	11.0%	4.9%
Female	16.0%	11.0%	5.0%

Figure 25: Cigarette smoking by sex, adult

Adult Cigarette Smoking by Race/Ethnicity, 2019

Race/Ethnicity	Current Smokers	Smoke Everyday	Smoke Some Days
Overall	15.9%	11.0%	4.9%
White, non-Hispanic	16.8%	12.6%	4.3%
Black, non-Hispanic	16.9%	9.5%	7.3%
Hispanic	8.6%	4.1%	-
American Indian or Alaskan Native, non-Hispanic	-	-	-

Figure 26: Cigarette smoking by race/ethnicity, adult

Note:
"-" indicates that the prevalence estimate was not available if the unweighted sample size for the denominator was <50 or the Relative Standard Error (RSE) is >0.3.
Source: "2019 Delaware Behavior Risk Factor Surveillance System." BRFSS Prevalence & Trends Data, Centers for Disease Control and Prevention.

Back to table of figures

Delaware Behavior Risk Factor Surveillance System (BRFSS)

Adult Cigarette Smoking by Educational Level, 2019

Educational Level	Current Smokers	Smoke Everyday	Smoke Some Days
Overall	15.9%	11.0%	4.9%
Less Than High School	24.9%	17.4%	7.5%
High School / G.E.D.	23.9%	17.1%	6.7%
Some Post-H.S.	14.7%	9.7%	5.0%
College Graduate	5.5%	3.5%	2.0%

Figure 27: Cigarette smoking by educational level, adult

Adult Cigarette Smoking by Age Group, 2019

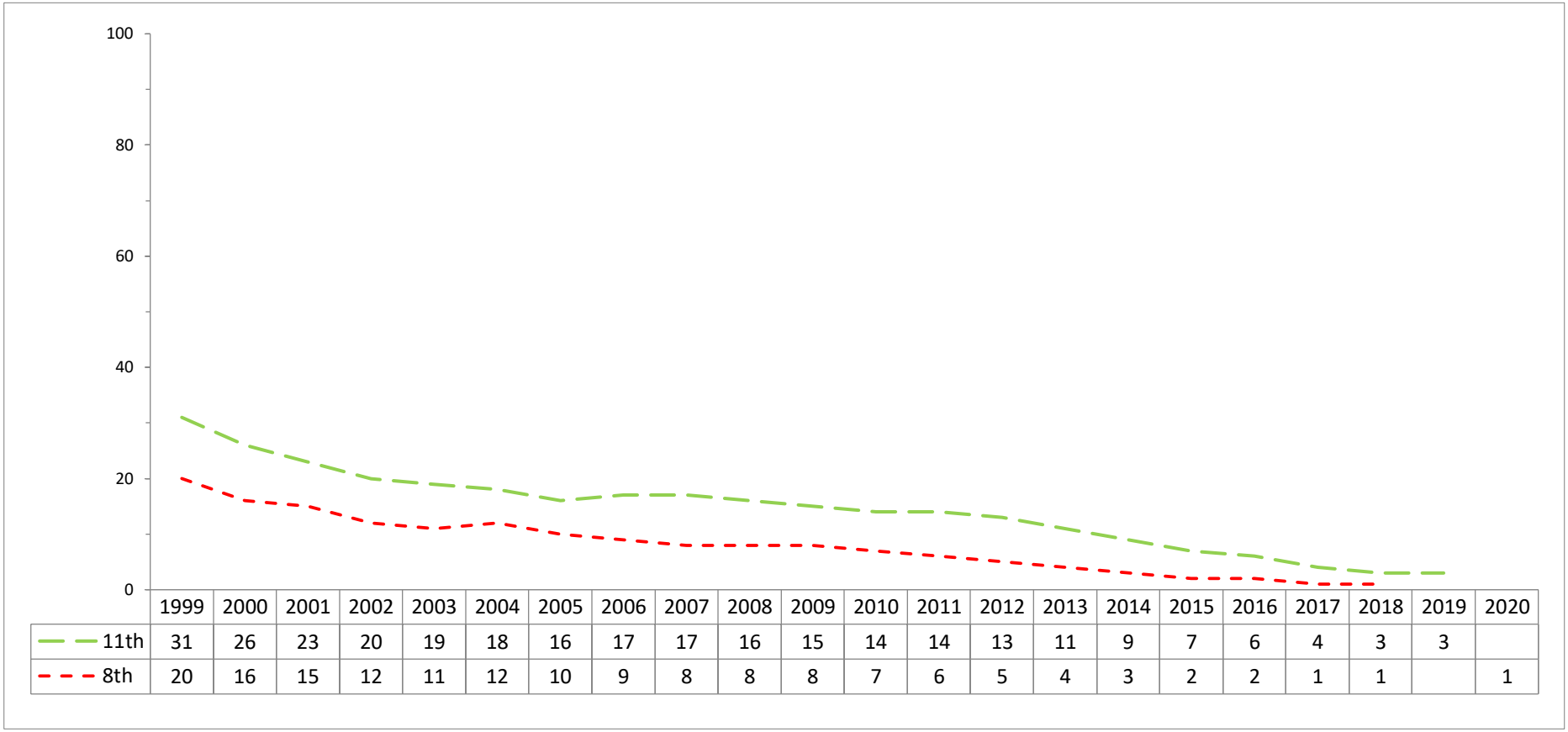
Age Group	Current Smokers	Smoke Everyday	Smoke Some Days
Overall	15.9%	11.0%	4.9%
18 - 24	15.6%	12.0%	-
25 - 34	21.7%	14.8%	6.9%
35 - 44	17.0%	11.1%	-
45 - 54	16.3%	12.8%	3.5%
55 - 64	17.1%	11.8%	5.3%
65 and Older	10.4%	6.2%	4.1%

Figure 28: Cigarette smoking by age group, adult

Note:
"-" indicates that the prevalence estimate was not available if the unweighted sample size for the denominator was <50 or the Relative Standard Error (RSE) is >0.3.
Source: "2019 Delaware Behavior Risk Factor Surveillance System." BRFSS Prevalence & Trends Data, Centers for Disease Control and Prevention.

Back to table of figures

Delaware School Survey
Trends in Past Month Cigarette Use, 8th and 11th grade, 1999-present (in percentages)



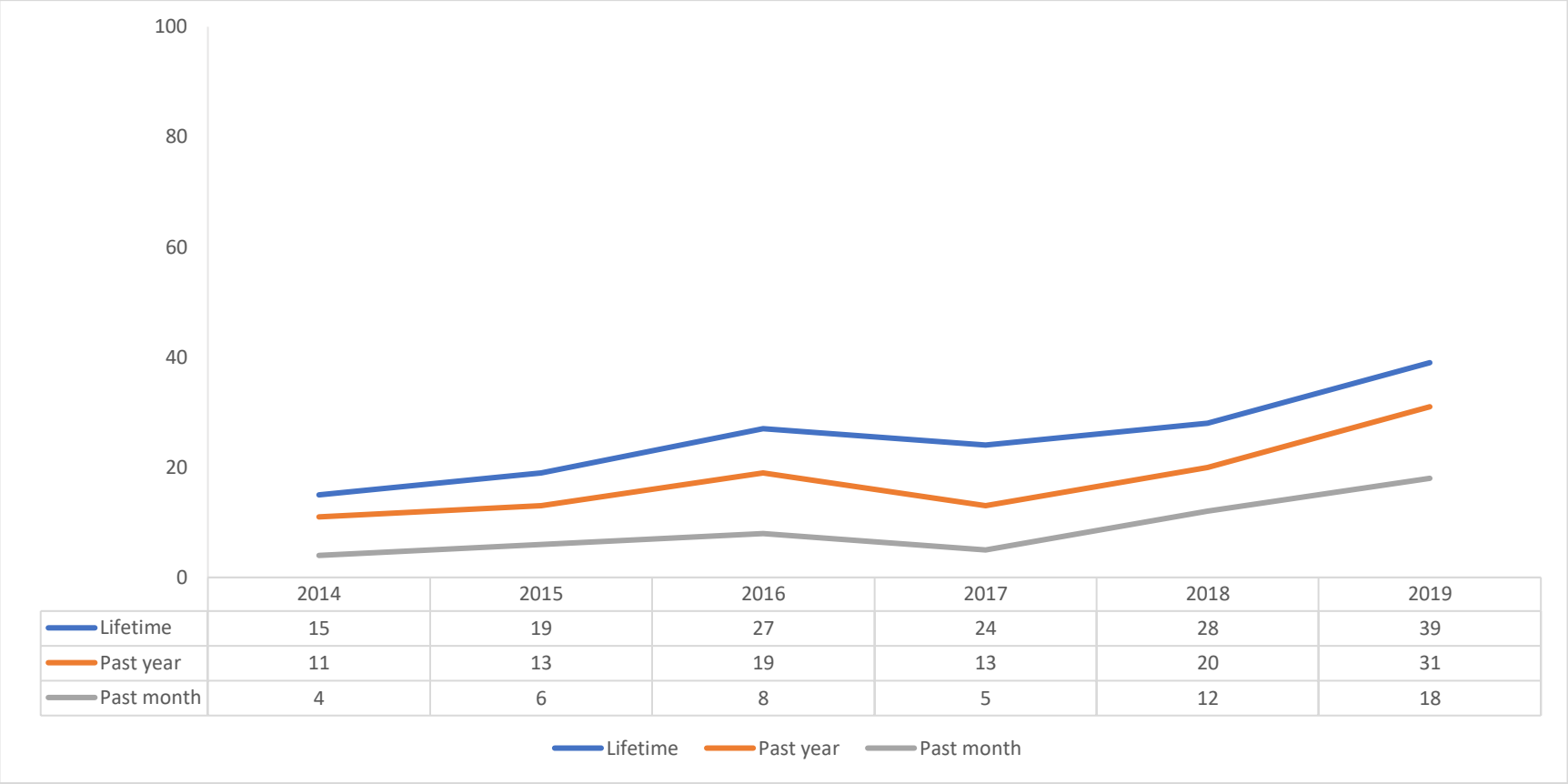
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th	31	26	23	20	19	18	16	17	17	16	15	14	14	13	11	9	7	6	4	3	3	
8th	20	16	15	12	11	12	10	9	8	8	8	7	6	5	4	3	2	2	1	1		1

Figure 29: Trends in students' past-month cigarette use, 8th and 11th grade

Notes: In 2019, the number of 8th grade students reporting past month cigarette use was too small to report.
11th grade data not available for the 2020 Delaware School Survey.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware School Survey
Trends in Vaping among 11th Grade Students
(in percentages)



	2014	2015	2016	2017	2018	2019
Lifetime	15	19	27	24	28	39
Past year	11	13	19	13	20	31
Past month	4	6	8	5	12	18

Figure 30: Trends in vaping, 11th grade

Notes:
Vaping includes use of e-cigarettes, Juul, or any other vaping device.
In 2020, 11th grade data was unavailable.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

National Survey on Drug Use and Health

Past-Month Tobacco Product Use by Age Group and Region, 2017-2018 and 2018-2019 (in percentages)

	12 or Older			AGE GROUP								
				12-17			18-25			26 or Older		
	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	21.96	21.28	.000	4.55	4.01	.000	27.46	25.08	.000	23.11	22.68	.053
Northeast	20.30	19.28	.005	4.18	3.59	.002	27.70	24.53	.000	20.85	20.12	.103
Delaware	23.59	22.60	.317	4.94	4.04	.089	27.40	25.59	.280	25.02	24.12	.459

Figure 31: Tobacco product use, past month, by age group and region

Past-Month Cigarette Use by Age Group and Region, 2017-2018 and 2018-2019 (in percentages)

	12 or Older			AGE GROUP								
				12-17			18-25			26 or Older		
	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	17.52	16.91	.000	2.93	2.50	.000	20.73	18.34	.000	18.71	18.35	.081
Northeast	16.22	15.43	.011	2.60	2.14	.002	20.28	17.65	.000	17.03	16.48	.151
Delaware	18.99	17.46	.077	2.81	1.93	.009	20.65	17.84	.046	20.47	19.03	.176

Figure 32: Cigarette use, past month, by age group and region

Notes:

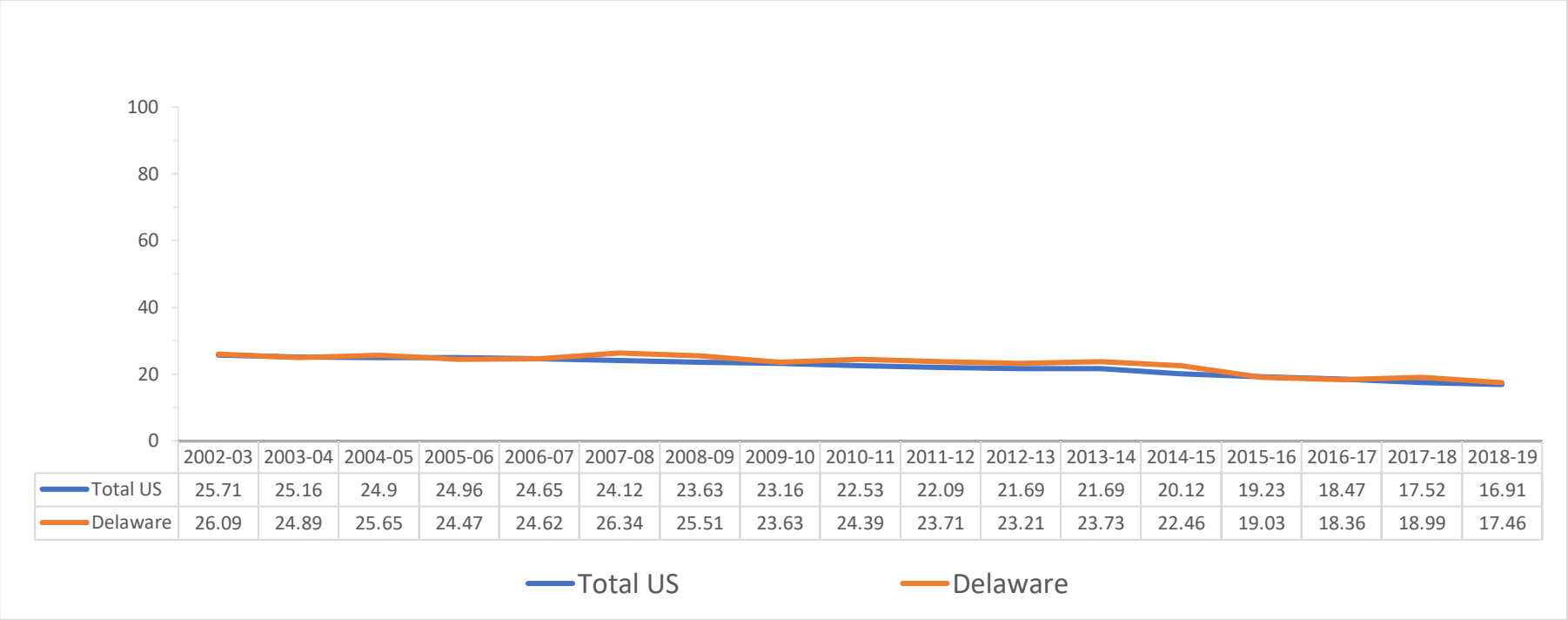
[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

National Survey on Drug Use and Health
National and Delaware
People (12 and Older) Reporting Cigarette Use in Past Month
(in percentages)



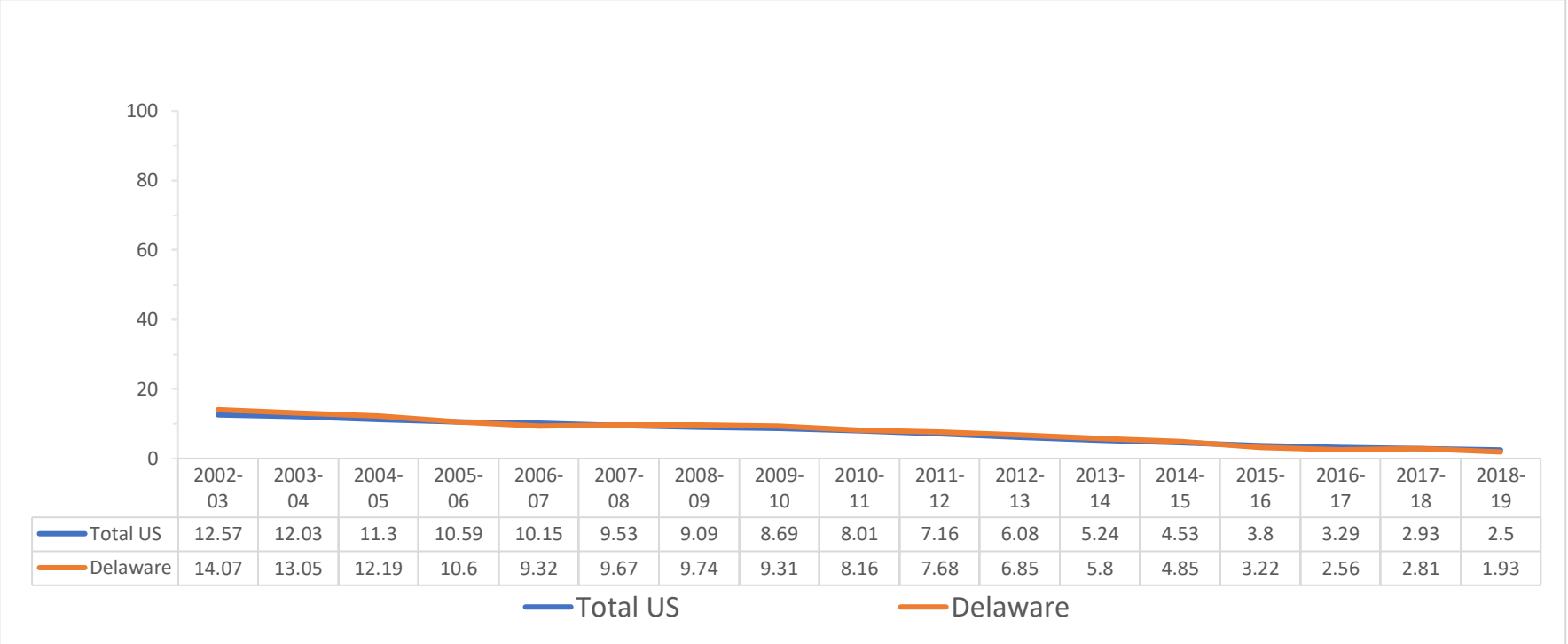
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total US	25.71	25.16	24.9	24.96	24.65	24.12	23.63	23.16	22.53	22.09	21.69	21.69	20.12	19.23	18.47	17.52	16.91
Delaware	26.09	24.89	25.65	24.47	24.62	26.34	25.51	23.63	24.39	23.71	23.21	23.73	22.46	19.03	18.36	18.99	17.46

Figure 33: Trends in cigarette use, past-month, national & Del., ages 12+

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

National Survey on Drug Use and Health
National and Delaware
Adolescents (12-17) Reporting Cigarette Use in Past Month
(in percentages)



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total US	12.57	12.03	11.3	10.59	10.15	9.53	9.09	8.69	8.01	7.16	6.08	5.24	4.53	3.8	3.29	2.93	2.5
Delaware	14.07	13.05	12.19	10.6	9.32	9.67	9.74	9.31	8.16	7.68	6.85	5.8	4.85	3.22	2.56	2.81	1.93

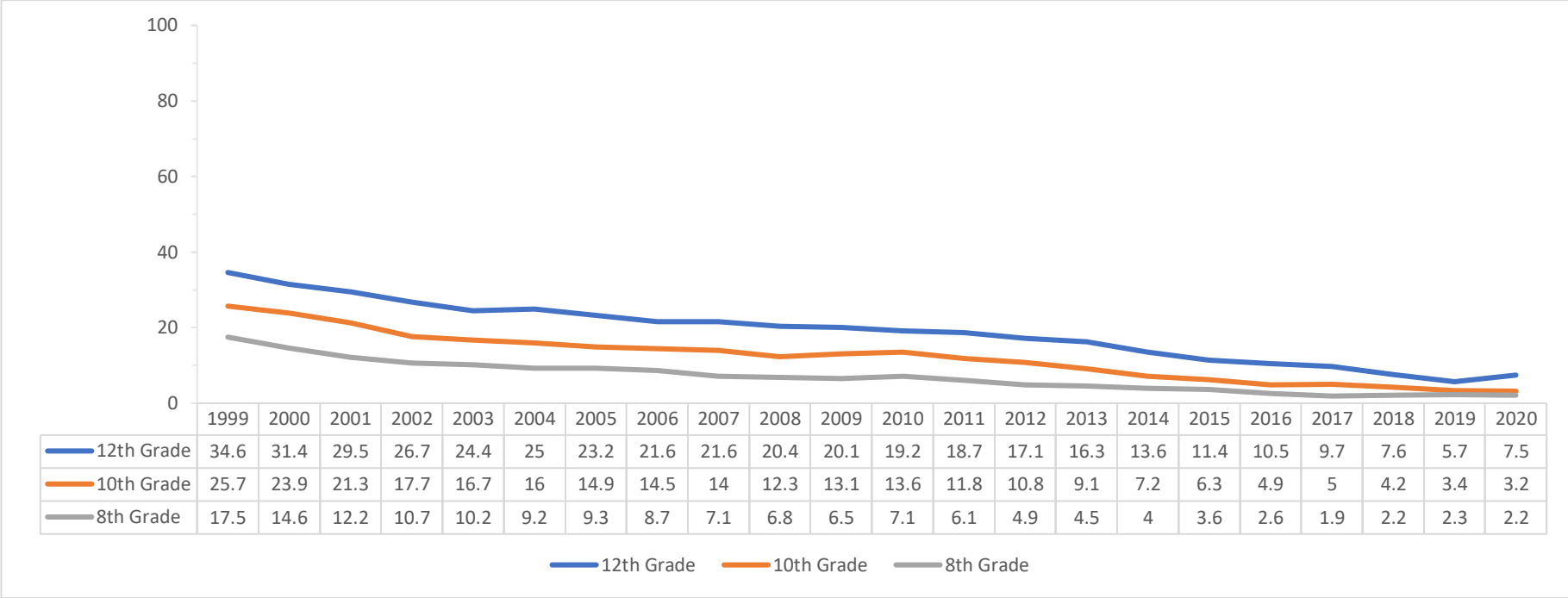
Figure 34: Trends in cigarette use, past-month, national & Del., ages 12-17

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

Monitoring the Future, 1999-2020

National Trends in Past Month Cigarette Use among 8th, 10th, and 12th Grade Students (in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	34.6	31.4	29.5	26.7	24.4	25	23.2	21.6	21.6	20.4	20.1	19.2	18.7	17.1	16.3	13.6	11.4	10.5	9.7	7.6	5.7	7.5
10th Grade	25.7	23.9	21.3	17.7	16.7	16	14.9	14.5	14	12.3	13.1	13.6	11.8	10.8	9.1	7.2	6.3	4.9	5	4.2	3.4	3.2
8th Grade	17.5	14.6	12.2	10.7	10.2	9.2	9.3	8.7	7.1	6.8	6.5	7.1	6.1	4.9	4.5	4	3.6	2.6	1.9	2.2	2.3	2.2

Figure 35: Trends in cigarette use, past month, national, 8th, 10th, and 12th grades

Source: Monitoring the Future, National Survey Results on Drug Use, 1975-2020. University of Michigan.

Back to table of figures

Delaware School Survey, 2002-2020
Students' Perceptions of Great Risks from Smoking a Pack of Cigarettes Daily (in percentages)

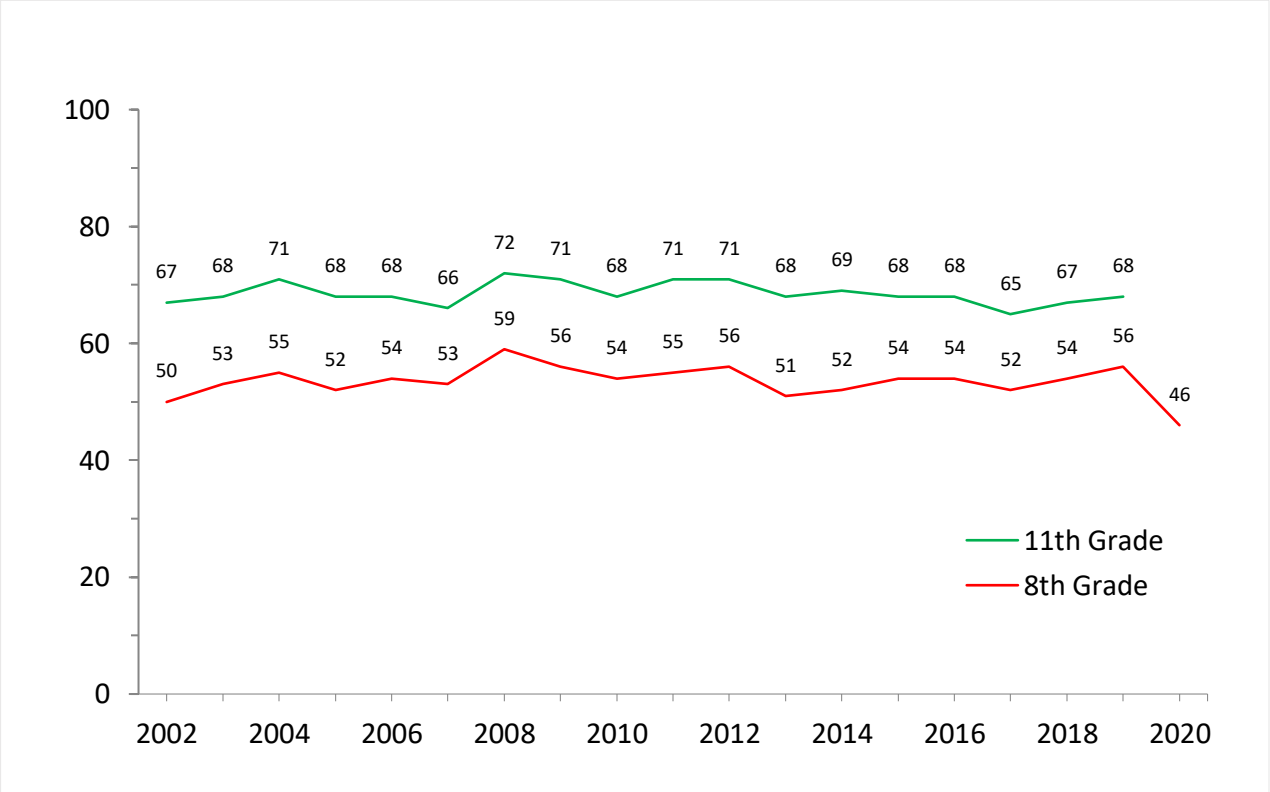


Figure 36: Trends in perceived great risk from smoking pack daily

Note:
11th grade data not available for the 2020 Delaware School Survey.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

National Survey of Drug Use and Health
Perceptions of Great Risks from Smoking One or More Packs of Cigarettes per Day by Age Group and Region, 2017-2018 and 2018-2019 (in percentages)[a]

	12 or Older			AGE GROUP								
				12-17			18-25			26 or Older		
State	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	71.73	71.52	.303	66.27	65.16	.002	67.04	66.86	.613	73.11	72.98	.602
Northeast	74.17	73.98	.617	68.78	67.15	.007	69.14	69.14	.990	75.51	75.43	.846
Delaware	71.54	71.81	.773	67.52	64.68	.079	70.30	67.31	.091	72.14	73.19	.347

Figure 37: Perception of risk in smoking 1+ packs/day by age group and region

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

3. **Alcohol**

National Overview

Alcohol remains the most commonly used substance among Delaware youth.

Approximately 1 in 3 young adults in Delaware report binge drinking in the past month.

Although the rate is declining, 17.7% of Delaware middle school students report riding in a car, at some point in their lifetime, with a driver who had been drinking.

There are serious public health and social costs that stem from alcohol use and addiction. One national study found that approximately $250 billion in costs were associated with excessive drinking in the U.S. in 2010 (Sacks et al., 2015). More recently, a report by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) found that nearly one million people had died of alcohol-related causes between 1999 and 2017 in the U.S. (National Institutes of Health, 2020). Frequent drinking can lead to alcohol use disorder (AUD), which can reduce daily functioning, impair social relationships, and lead to critical health outcomes. Data from the National Survey of Drug Use and Health (NSDUH) indicate that one in 20 people age 12 and over in the U.S. fit the criteria for an alcohol use disorder (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). Long-term alcohol use has been linked to a number of chronic and deadly conditions, including diseases of the liver and pancreas, various types of cancers, and risk of stroke (Rehm et al., 2009). Infants of mothers who drink during pregnancy are at great risk for developing Fetal Alcohol Spectrum Disorder which can lead to severe complications including lifelong developmental delays and disabilities (Streissguth et al., 2004). The NSDUH reports that adult rates of past-month alcohol use, although relatively stable, hover at about 50% (SAMHSA, 2020); however, a research review by the National Institute of Alcohol Abuse and Alcoholism (NIAAA) indicates that women's rates of drinking and binge drinking have increased over the past several decades (NIAAA, 2021) in comparison to men's rates among certain age groups. High school youth reports of past-month use declined from 50% in 1999 to 29.2% in 2019 (National Youth Risk Behavior Survey, Centers for Disease Control and Prevention, n.d.). While the downward trend of alcohol use over the past 20 years is heartening, alcohol remains a substance of choice for both teens and adults with serious public health implications.

Early research suggests that substance use and mental health issues increased during the COVID-19 pandemic (Czeisler et al., 2020; Czeisler et al., 2021). Although most of the data included in this chapter were collected prior to 2020, it will be important to consider this lens when interpreting these data in the future.

Delaware Overview

Understandably, a great deal of attention in recent years has focused on opioid misuse in Delaware. Among students, however, alcohol remains the most commonly reported substance used. The most recently available data from the Delaware School Survey (DSS, 2019) indicates that one in four 11th graders drank alcohol in the previous month. In 2020, 7% of 8th graders reported that they drank alcohol in the past month (DSS, 2020). Though alcohol use among Delaware students declined over the past five years, mirroring national trends, student surveys show that too many students still do not adequately understand the risks involved with alcohol consumption. In 2019, only half of Delaware 11th graders surveyed indicated that they believed there is a "great risk" in binge drinking, and 8% reported binge drinking within the past two weeks (DSS, 2019). In the same survey, 5% reported drinking and driving within the past month, while 14% reported drinking and driving at some time in their lifetime. Of note, only 37% of 8th graders identified binge drinking as a great risk in the 2020 DSS, down from 49% the preceding year.

The use of alcohol at an early age has been linked to future alcohol dependence and a greater likelihood of using illicit substances later in life (Barry et al., 2016). According to the DSS, the average age by which 8th graders started drinking decreased from 12.6 years of age in 2019 to 11.8 years of age in 2020 (DSS, 2020).

Alcohol consumption also remains prevalent among Delaware adults with more than half (57%) reporting current use (Behavioral Risk Factor Surveillance System [BRFSS], 2019). According to the National Survey of Drug Use and Health (NSDUH), more than one in three Delaware adults between the ages of 18-25 reported binge drinking within the past month (2018-2019). In 2019, the Treatment Episode Data Set (TEDS) indicates that alcohol was the primary substance reported at admission among 10.7 % of clients receiving publicly funded treatment in Delaware, and it was identified as a secondary substance in another 8.2% of admissions (for additional details on TEDS data, please see Chapter 6: Other Illegal Drugs.)

The potential risks related to alcohol misuse can be great. In 2020, 4% of all traffic crashes in Delaware were alcohol-related. Thirty percent of traffic fatalities and 7% of traffic-related injuries were associated with crashes involving alcohol, and 2,478 driving under the influence (DUI) arrests were made statewide (Delaware State Police, Delaware Information and Analysis Center, 2021).[13]

[13] While there was a slight decline among DUIs and alcohol-involved crashes from 2019, traffic activity was unusual in 2020 due to COVID-19 pandemic and the ensuing stay-at-home orders, shifts to remote education and work environments, business closings, and other conditions.

Binge drinking, in particular, is associated with an increased risk of victimization. Data from the 2018 College Risk Behavior Survey show that approximately one out of five University of Delaware students who reported that they frequently binge drink alcohol (consume five or more drinks in a single sitting) also reported being a victim of assault, compared to approximately one in 16 students who reported abstaining from alcohol use. Students who reported binge drinking also reported higher rates of sexual assault (Center for Drug and Health Studies, 2017). Nationally, researchers have consistently shown a clear association between alcohol use and intimate partner violence (Deveries et al., 2013). However, it is important to note that this type of survey data does not allow us to draw conclusions that binge drinking causes victimization or that being victimized causes binge or frequent drinking; it simply shows that students who experience one are more likely to experience the other.

Data in Action: Alcohol During the COVID-19 Pandemic

By the middle of March 2020, local and state governments across the U.S. implemented stay-at-home orders in response to the global coronavirus pandemic. This included the temporary closure of non-essential businesses and restrictions on social gatherings. Some experts were concerned that conditions of the pandemic, such as increased isolation, would trigger riskier drinking habits since individuals would be able to drink at home alone or to cope with stress and uncertainty (Smith, 2020). Others suggested that individuals might have consumed less because they were no longer attending social gatherings where alcohol is normally present (Furnari, 2020). As people prepared to stay at home indefinitely and could not dine indoors at restaurants and bars, retail sales of alcohol spiked across the U.S. (Bremner, 2020; Micallef, 2020). Many states, including Delaware, allowed restaurants serving carry out meals to also sell alcoholic beverages to-go (Cormier, 2020). Over a year later, COVID-19 vaccines have become available and many have been distributed across the U.S., leading to a return of some normalcy (e.g., some individuals returning to work and school settings, attending in-person events, etc.). However, the pandemic is still highly prevalent, with variants of the virus emerging and sustained uncertainties relating to mask regulations, social distancing procedures, and limitations on social gatherings.

Researchers with RTI collected data regarding people's drinking habits in February 2020 (prior to the pandemic and government-issued stay-at-home orders in the U.S.), then in April, July, and November that year. They found that the COVID-19 pandemic is associated with increases in alcohol consumption, specifically among Black and Hispanic women, Black men, people with children, and people with mental health issues (Barbosa, Dowd, and Karriker-Jaffe, 2021). Another team of researchers found that one-third of the 832 online respondents reported binge drinking during the pandemic, and 60% reported increased drinking. Respondents who reported experiencing COVID-19 related stress reported higher levels of consumption and more frequent drinking (Grossman, Benjamin-Neelon, & Sonnenschein, 2020).

Increased alcohol consumption during the pandemic is of great concern not only for potential long-term implications, but also because drinking is associated with various diseases and mental health disorders which may lead to increased risk for COVID-19 (WHO, 2020). It will be important to monitor alcohol consumption, particularly among marginalized communities, and focus on preventing and mitigating the consequences of increased drinking during the pandemic. Additionally, it would be of interest to continue monitoring changes since public spaces have begun opening back up in the U.S. and more individuals are attending social gatherings.

National Survey on Drug Use and Health
Alcohol Use in Delaware, by Age Group, 2018-2019
(annual average percentages)

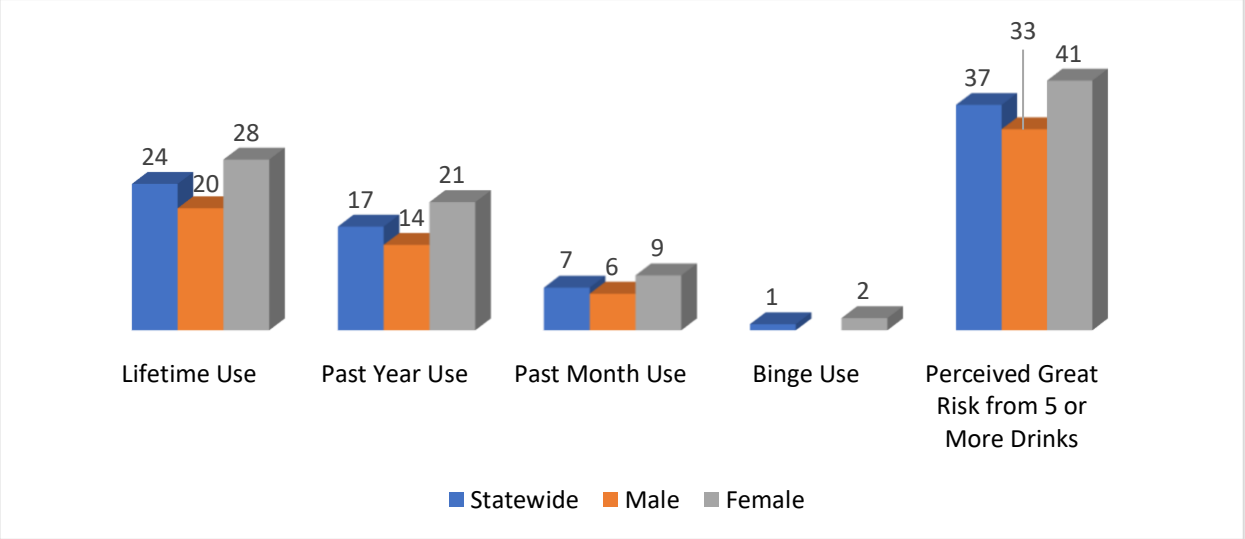
AGE GROUP					
Measure	**Total 12 or Older**	**12-17**	**18-25**	**26 or Older**	**12-20[c]**
ALCOHOL					
Past-Month Alcohol Use	56.44	10.09	59.09	60.93	20.59
Past-Month Binge Alcohol Use[b]	24.17	4.50	34.86	24.73	11.03
Perceived Great Risk of Drinking 5 or More Drinks Once or Twice a Week	42.85	42.58	37.57	43.62	--

Figure 38: Alcohol use in Delaware by age group

Notes:
"--" Not available, estimates have not been released by NSDUH.
[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.
[b] Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days. In 2015, the definition for females changed from five to four drinks.
[c] Underage drinking is defined for persons aged 12 to 20.
Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

2020 Delaware School Survey
Alcohol Use among Delaware 8th Graders
(in percentages)



	Lifetime Use	Past Year Use	Past Month Use	Binge Use [a]	Perceived Great Risk from 5 or More Drinks
Statewide	24	17	7	1	37
Male	20	14	6	-	33
Female	28	21	9	2	41

Figure 39: Alcohol use, 8th graders

Notes:
"-" indicates that the prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
[a] Binge drinking defined as 4 or more drinks of alcohol in a row for female students and 5 or more drinks of alcohol in a row for male students in the past two weeks (Previously binge use was reported as 3 or more drinks).
* Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey

Average Age of Onset for Alcohol Use

8th Grade	11th Grade
11.8 years	_

Figure 40: Average age of onset[1] of alcohol use, 8th and 11th grades[2]

Notes:

[1] Age of onset calculated among students who report ever drinking alcohol

[2] In 2020, 11th grade Delaware School Survey data was unavailable.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2019 Delaware Behavior Risk Factor Surveillance System (BRFSS)

Alcohol Use by Sex Among Delaware Adults

Sex	Current Drinking	Binge Drinking	Heavy Drinking
Overall	57.0%	17.2%	7.3%
Male	61.3%	22.1%	7.4%
Female	53.0%	12.8%	7.2%

Figure 41: Alcohol use by sex, DE adults

Alcohol Use by Race and Ethnicity Among Delaware Adults

Race/Ethnicity	Current Drinking	Binge Drinking	Heavy Drinking
Overall	57.0%	17.2%	7.3%
White, non-Hispanic	60.4%	18.8%	8.3%
Black, non-Hispanic	53.9%	14.3%	-
Hispanic	41.6%	13.7%	-
American Indian or Alaskan Native, non-Hispanic	-	-	-

Figure 42: Alcohol use by race and ethnicity, DE adults

Notes:
Prevalence estimate not available if the unweighted sample size for the denominator was <50 or the Relative Standard Error (RSE) is >0.3 or if the state did not collect data for that calendar year.
Current drinking is defined by the BRFSS as at least one drink of alcohol within the past 30 days.
Binge drinking is defined in the BRFSS as 4 or more drinks for a woman or 5 or more drinks for a man on an occasion during the past 30 days.
Heavy drinking is defined by the BRFSS as more than 7 drinks per week for women or more than 14 drinks per week for men.

Source: "2019 Delaware Behavior Risk Factor Surveillance System." BRFSS Prevalence & Trends Data, Centers for Disease Control and Prevention.

Back to table of figures

2019 Delaware Behavior Risk Factor Surveillance System (BRFSS)

Alcohol Use by Educational Attainment Among Delaware Adults

Educational Level	Current Drinking	Binge Drinking	Heavy Drinking
Overall	57.0%	17.2%	7.3%
Less Than High School	33.5%	10.9%	-
High School / G.E.D.	48.0%	17.8%	7.6%
Some Post-H.S.	61.1%	20.1%	11.0%
College Graduate	70.9%	16.2%	4.6%

Figure 43: Alcohol use by educational attainment, DE adults

Alcohol Use by Age Group Among Delaware Adults

Age Group	Current Drinking	Binge Drinking	Heavy Drinking
Overall	57.0%	17.2%	7.3%
18 - 24	57.3%	31.5%	12.7%
25 - 34	64.8%	28.6%	7.2%
35 - 44	61.4%	18.2%	7.4%
45 - 54	62.2%	15.9%	7.4%
55 - 64	54.9%	13.7%	7.0%
65 and Older	47.0%	5.7%	4.9%

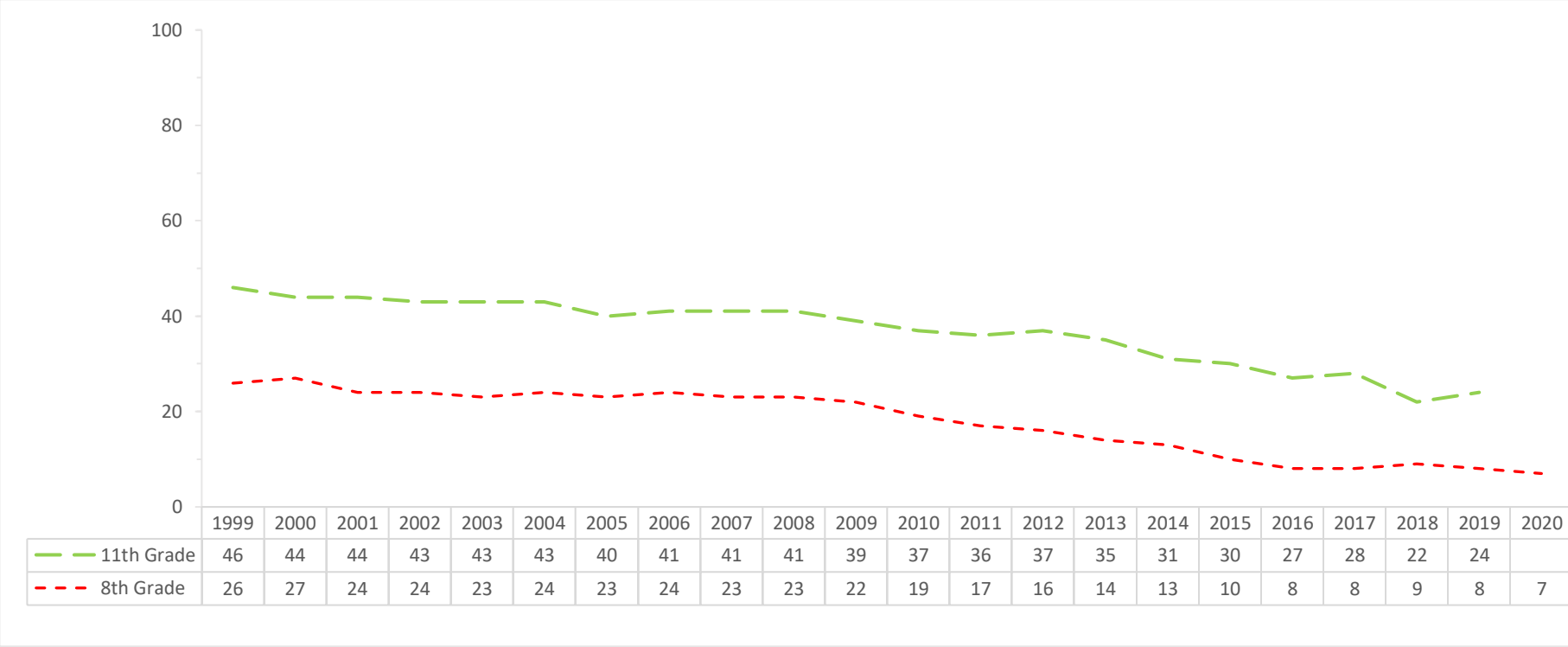
Figure 44: Alcohol use by age group, DE adults

Notes:
Prevalence estimate not available if the unweighted sample size for the denominator was <50 or the Relative Standard Error (RSE) is >0.3 or if the state did not collect data for that calendar year.
Current drinking is defined by the BRFSS as at least one drink of alcohol within the past 30 days.
Binge drinking is defined in the BRFSS as 4 or more drinks for a woman or 5 or more drinks for a man on an occasion during the past 30 days.
Heavy drinking is defined by the BRFSS as more than 7 drinks per week for women or more than 14 drinks per week for men.

Source: "2019 Delaware Behavior Risk Factor Surveillance System." BRFSS Prevalence & Trends Data, Centers for Disease Control and Prevention.

Back to table of figures

Delaware School Survey
Trends in Delaware Students' Self-Reported
Past Month Use of Alcohol Use by Grade, 1999-Present
(in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th Grade	46	44	44	43	43	43	40	41	41	41	39	37	36	37	35	31	30	27	28	22	24	
8th Grade	26	27	24	24	23	24	23	24	23	23	22	19	17	16	14	13	10	8	8	9	8	7

Figure 45: Trends in past month alcohol use, 8th and 11th graders

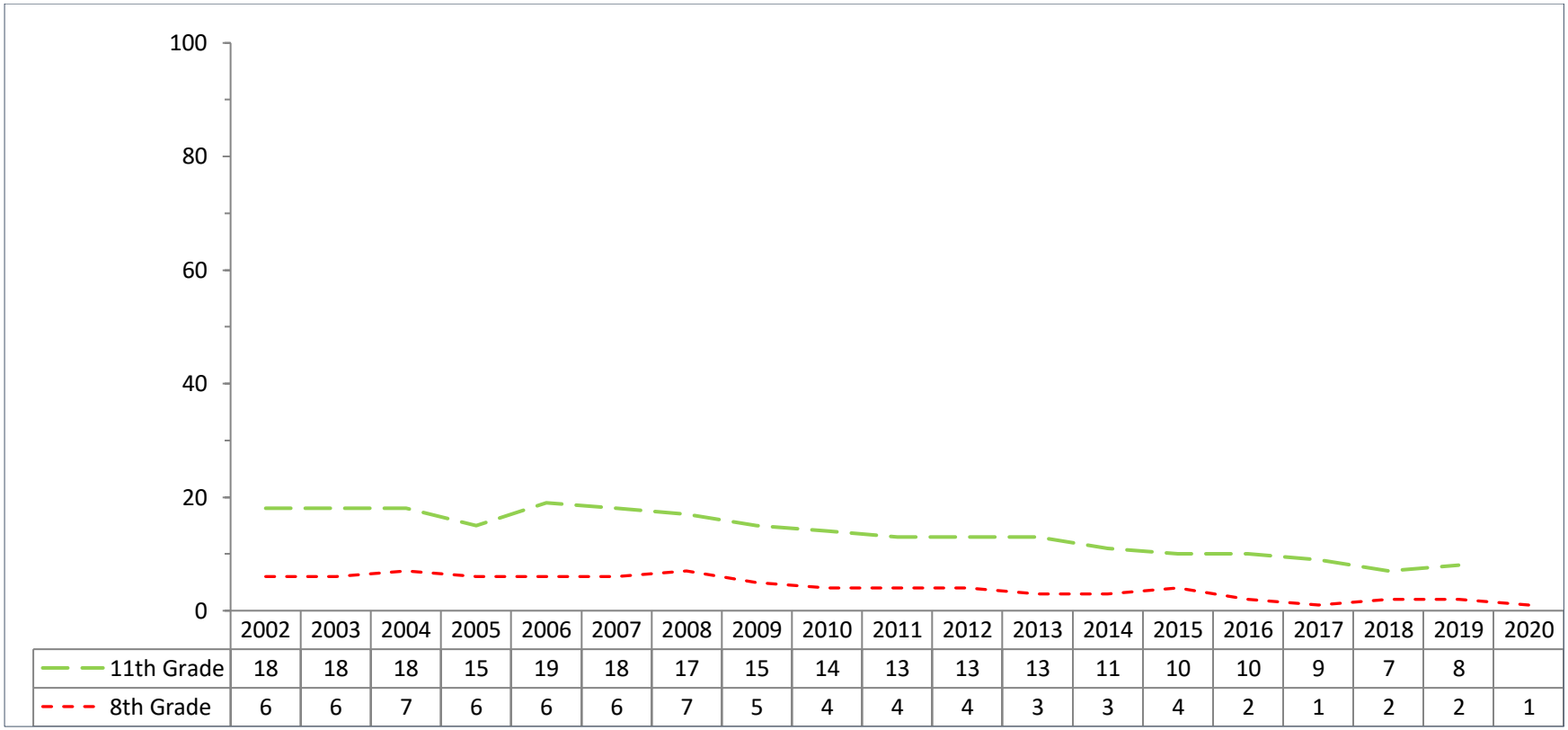
Notes:
Prevalence estimates for past month alcohol use by 5th graders were too small (n<30) to report.
11th grade data not available for the 2020 Delaware School Survey.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware School Survey

Trends in Students' Self-Reported Binge Drinking[a], 2002-2020

(in percentages)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th Grade	18	18	18	15	19	18	17	15	14	13	13	13	11	10	10	9	7	8	
8th Grade	6	6	7	6	6	6	7	5	4	4	4	3	3	4	2	1	2	2	1

Figure 46: Trends in binge drinking, 8th and 11th graders

Notes:

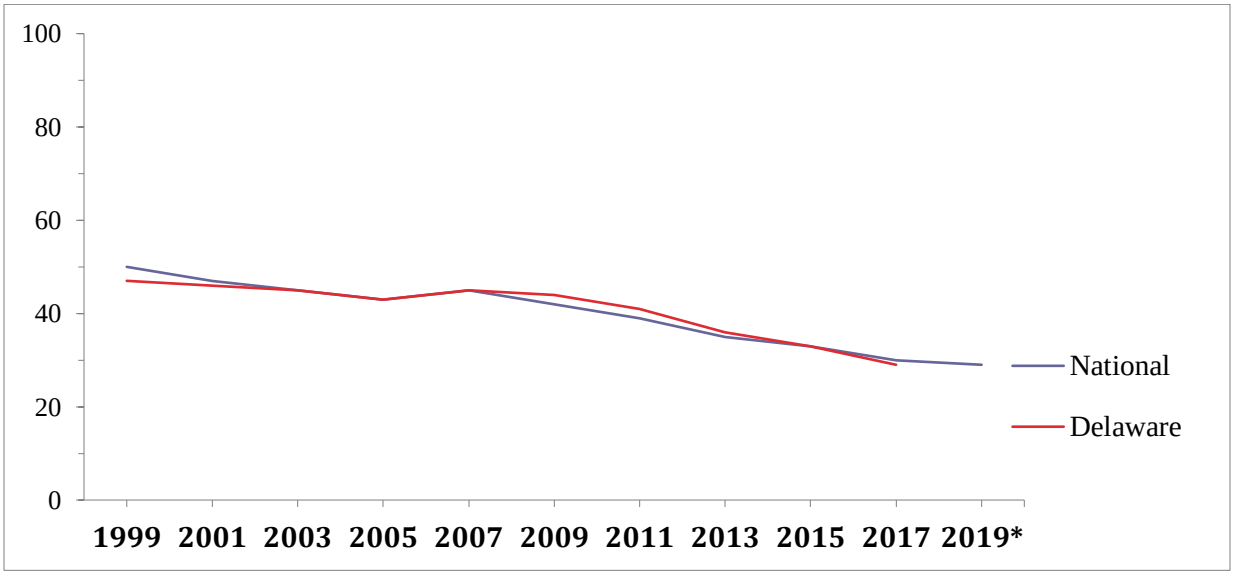
11th grade data not available for the 2020 Delaware School Survey.

[a] Binge drinking defined as 4 or more drinks of alcohol in a row for female students and 5 or more drinks of alcohol in a row for male students in the past two weeks (Previously binge use was reported as 3 or more drinks).

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Youth Risk Behavior Survey
National and Delaware
High School Students' Past Month Use of Alcohol, 1999-2019
(in percentages)



Year	National	Delaware
1999	50	47
2001	47	46
2003	45	45
2005	43	43
2007	45	45
2009	42	44
2011	39	40
2013	35	36
2015	33	31
2017	30	29
2019*	29	-

Figure 47: Trends in alcohol use, past-month, HS

Note: *National data is weighted; Delaware data is weighted except for in 2019, which is unavailable
Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

National Survey on Drug Use and Health
Past Month Alcohol Use by Age Group and Region
2017-2018 and 2018-2019
(in percentages)[a]

	Age Group (Years)											
	12 or Older			12-17			18-25			26 or Older		
State	2017-2018	2018-2019	*p* value[b]	2017-2018	2018-2019	*p* value[b]	2017-2018	2018-2019	*p* value[b]	2017-2018	2018-2019	*p* value[b]
Total U.S.	51.37	50.92	.051	9.43	9.19	.286	55.73	54.72	.018	55.57	55.15	.135
Northeast	55.62	53.97	.000	10.37	9.80	.128	61.60	58.93	.005	59.48	57.84	.002
Delaware	52.91	56.44	.004	9.43	10.09	.446	56.41	59.09	.223	57.02	60.93	.008

Figure 48: Alcohol use, past month, by age group and region

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

National Survey on Drug Use and Health
Past-Month Binge* Alcohol Use by Age Group and Region
2017-2018 and 2018-2019
(in percentages)[a]

State	12 or Older			AGE GROUP (Years)								
				12-17			18-25			26 or Older		
	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	24.49	24.21	.135	4.97	4.78	.210	35.89	34.58	.001	24.95	24.82	.588
Northeast	26.04	25.17	.013	5.45	5.04	.127	41.66	39.69	.016	25.78	25.05	.087
Delaware	23.48	24.17	.438	4.87	4.50	.467	37.25	34.86	.216	23.46	24.73	.248

Figure 49: Alcohol use, binge drinking, past month, by age group and region

Notes:

* Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days. In 2015, the definition for females changed from five to four drinks.

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

National Survey on Drug Use and Health
Past-Month Alcohol Use and Binge* Alcohol Use among Persons Ages 12 to 20, by Region 2017-2018 and 2018-2019 (in percentages)[a]

State	Alcohol Use in Past Month			Binge Alcohol Use in Past Month		
	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	19.25	18.67	.072	11.66	11.24	.094
Northeast	22.01	20.33	.000	13.93	12.83	.004
Delaware	17.72	20.59	.005	10.20	11.03	.273

Figure 50: Alcohol use, binge drinking, past-month, ages 12-20 by region

Notes:

* Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days. In 2015, the definition for females changed from five to four drinks.

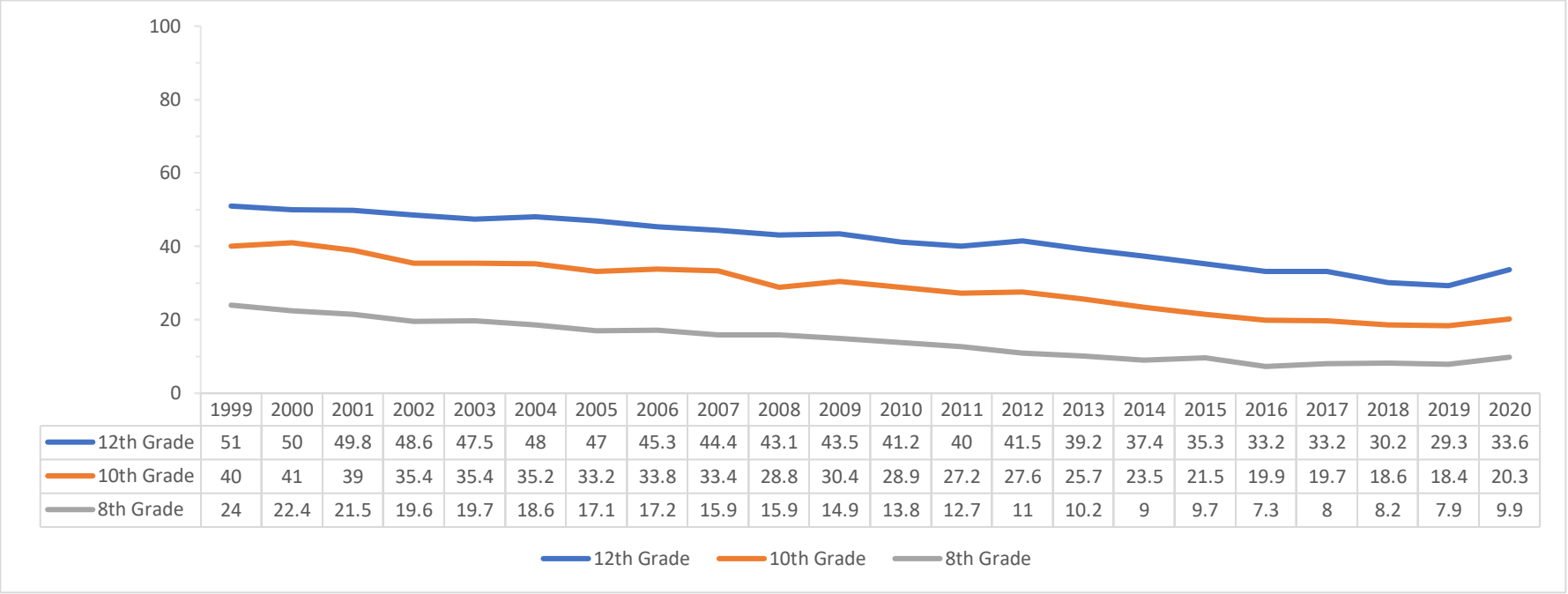
[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

Monitoring the Future
National Trends in Past 30-day Alcohol Use
8th, 10th, and 12th Grade
(in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	51	50	49.8	48.6	47.5	48	47	45.3	44.4	43.1	43.5	41.2	40	41.5	39.2	37.4	35.3	33.2	33.2	30.2	29.3	33.6
10th Grade	40	41	39	35.4	35.4	35.2	33.2	33.8	33.4	28.8	30.4	28.9	27.2	27.6	25.7	23.5	21.5	19.9	19.7	18.6	18.4	20.3
8th Grade	24	22.4	21.5	19.6	19.7	18.6	17.1	17.2	15.9	15.9	14.9	13.8	12.7	11	10.2	9	9.7	7.3	8	8.2	7.9	9.9

Figure 51: National trends in past 30-day alcohol use, 8th, 10th, and 12th grade

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

Delaware School Survey, 1999-2019
Students' Perception of a "Lot of Risk" from Drinking Daily, 5th Grade
(in percentages)

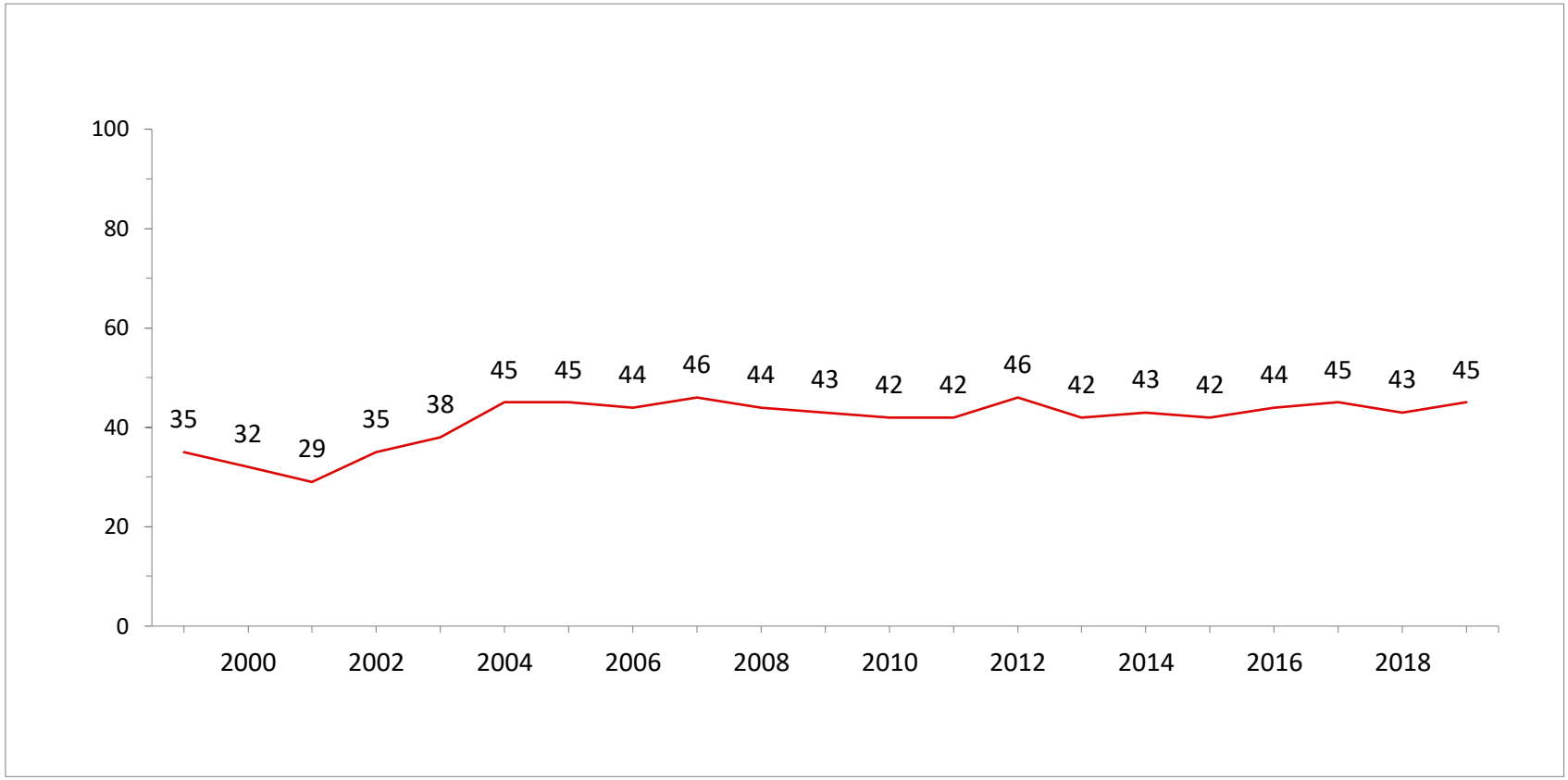


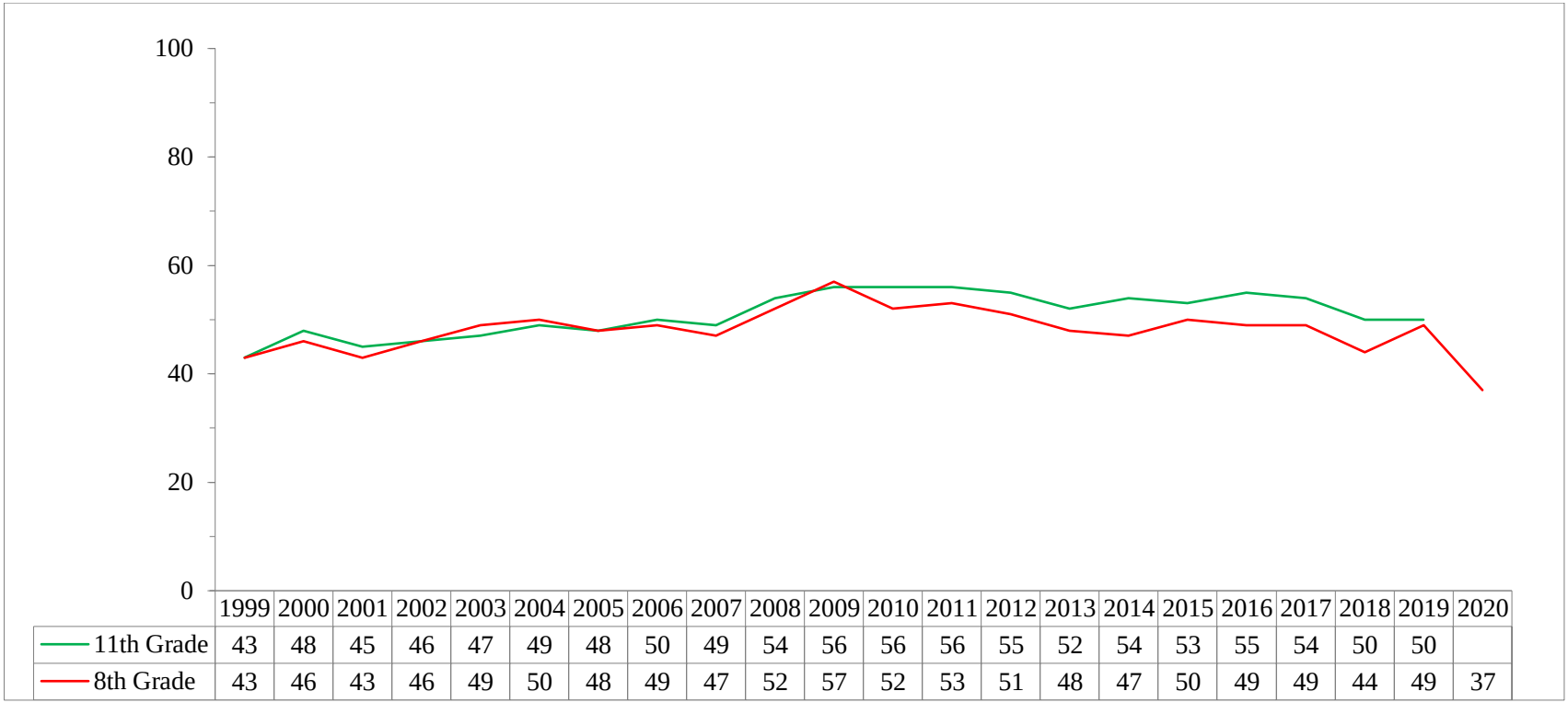
Figure 52: Trends in perception of a "lot of risk" from drinking daily, 5th graders

Note: Data on 5th grade students from the Delaware School Survey was unavailable in 2020.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: 5th Grade* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware School Survey, 1999-2020

Students' Perception of "Great Risk" from Having 5 or More Drinks Once or Twice a Week (in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th Grade	43	48	45	46	47	49	48	50	49	54	56	56	56	55	52	54	53	55	54	50	50	
8th Grade	43	46	43	46	49	50	48	49	47	52	57	52	53	51	48	47	50	49	49	44	49	37

Figure 53: Trends in perception, "great risk" from having 5 or more drinks, 8th & 11th graders

Note: 11th grade data not available for the 2020 Delaware School Survey.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

National Survey of Drug Use and Health

Perceptions of Great Risk from Having 5 of More Drinks Once or Twice a Week by Age Group and Region 2017-2018 and 2018-2019 (in percentages)[a]

State	12 or Older			AGE GROUP (Years)								
				12-17			18-25			26 or Older		
	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	44.78	44.83	.845	43.39	43.11	.414	37.69	38.02	.368	46.08	46.10	.952
Northeast	43.45	44.41	.018	42.43	42.56	.831	34.70	35.62	.136	44.93	45.95	.040
Delaware	42.31	42.85	.613	43.34	42.58	.626	38.30	37.57	.644	42.78	43.62	.516

Figure 54: Perception of great risk from having five or more drinks once or twice a week, age group and region

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

2019 Middle School Youth Risk Behavior Survey

Students Who Ever Rode with a Driver Who Had Been Drinking*, 2007-2019 (in percentages)

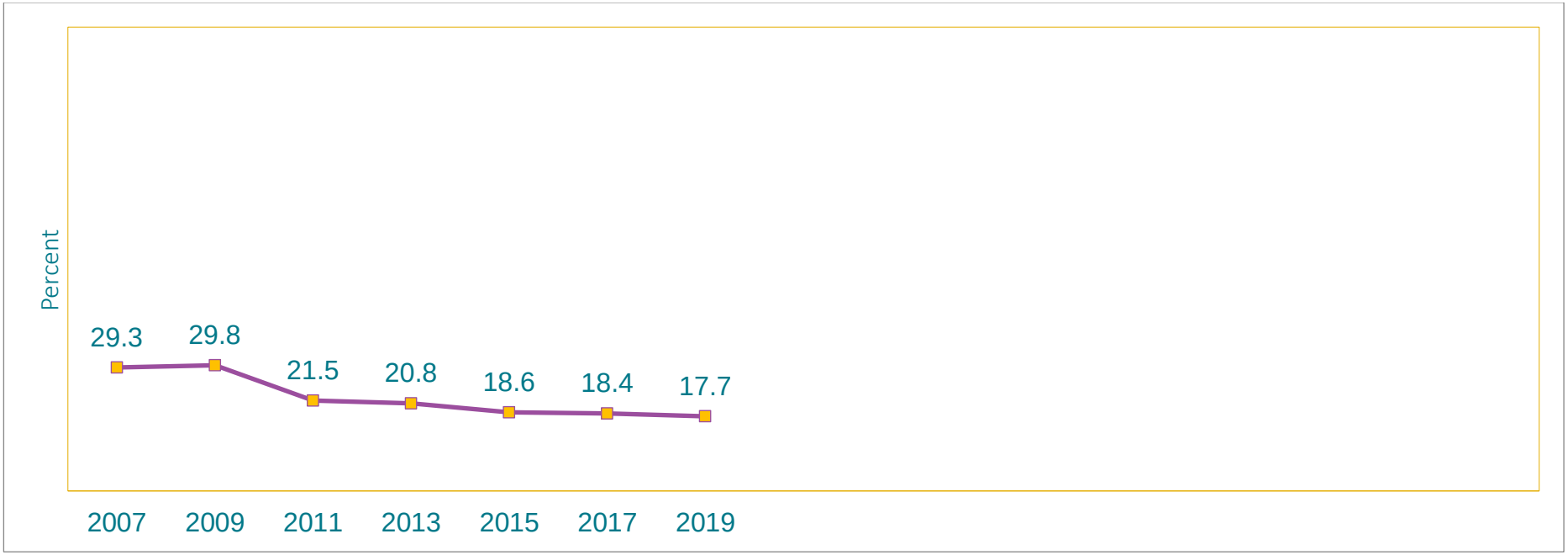


Figure 55: Trends in students who ever rode with a driver who had been drinking, MS

*In a car

†Decreased 2007-2019 [Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade ($p < 0.05$). Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).]

This graph contains weighted results.

Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

Delaware Secondary School Survey
Trends in Delaware Students' Past-Month Reports of Drinking and Driving among Delaware 11th Graders, 1999-2019 (in percentages)

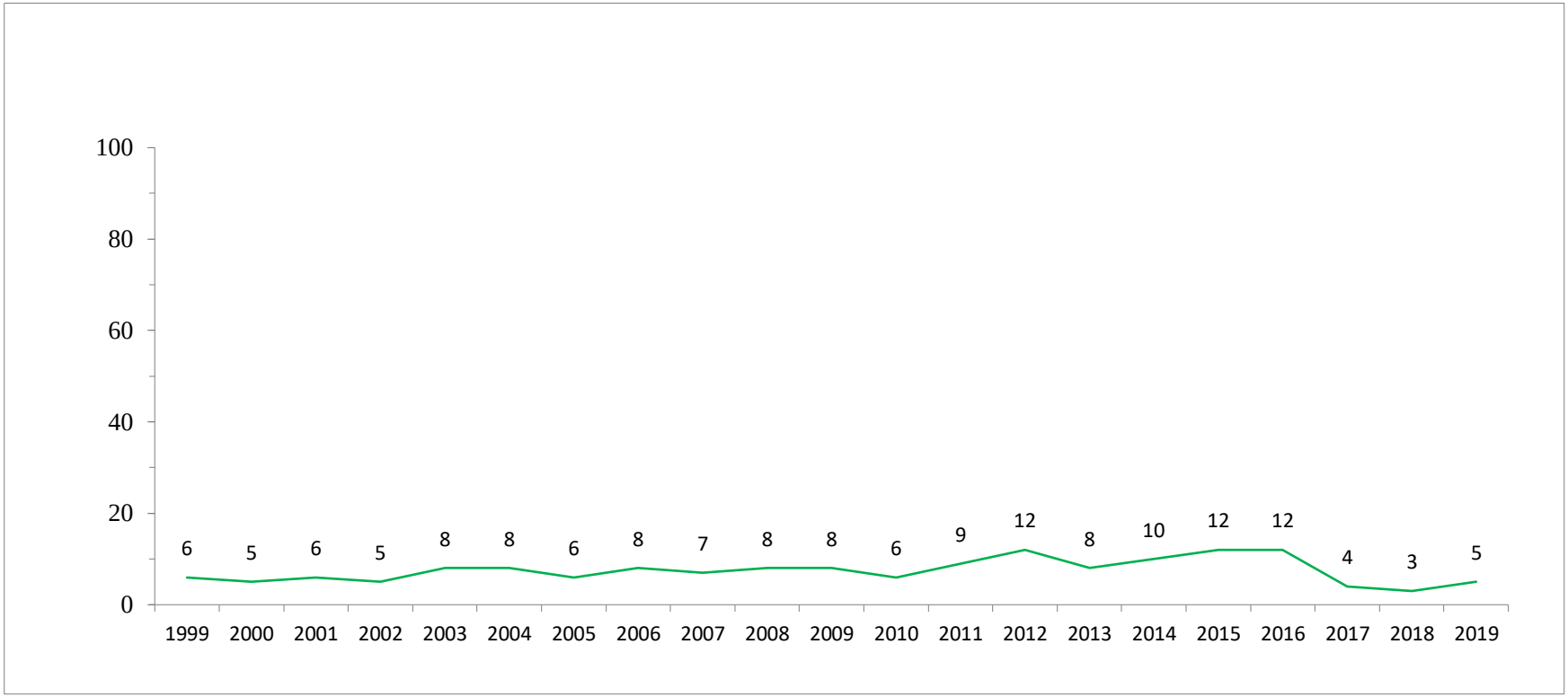


Figure 56: Trends in reported drinking and driving in past month, 11th graders

Note: Data on 11th grade students from the Delaware School Survey was unavailable in 2020.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware State Police

Driving Under the Influence Arrests, 2020

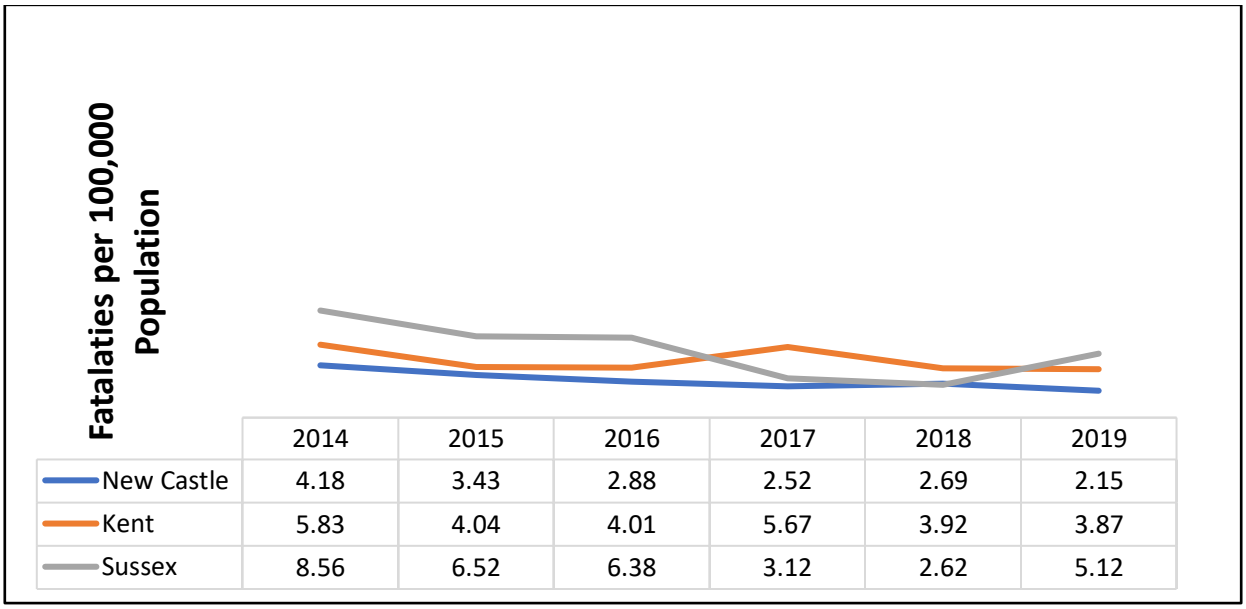
Age Range	Male	Female	Total
15 and under	0	0	0
16	8	2	10
17	13	2	15
18	40	4	44
19	31	9	40
20	37	10	47
21-24	184	66	250
25-34	611	201	812
35-44	446	160	606
45-54	270	87	357
55-64	176	50	226
65 & older	56	15	71
Total	1,872	606	2,478

Figure 57: Delaware DUI arrests by age and sex

Source: Delaware's Annual Traffic Statistical Report. 2020. Delaware State Police, Delaware Information and Analysis Center.

Back to table of figures

National Highway Traffic Safety Administration
Trends in Alcohol-Involved Traffic Fatalities in Delaware by County, 2014-2019 (in percentages)



	2014	2015	2016	2017	2018	2019
New Castle	4.18	3.43	2.88	2.52	2.69	2.15
Kent	5.83	4.04	4.01	5.67	3.92	3.87
Sussex	8.56	6.52	6.38	3.12	2.62	5.12

Figure 58: Trends in Delaware traffic fatalities/alcohol use by county

Note: Fatalities per 100,000 population

Source: National Highway Traffic Safety Administration. Performance Measures, Delaware.

Back to table of figures

4. **Marijuana**

National Overview

Nearly 28% of young adults in Delaware (aged 18-25) report using marijuana in the past month, a rate slightly higher than the national and regional rates.

Only 1 in 3 Delaware 8th graders perceive great risk in using marijuana regularly, a trend that has been on the decline for over 20 years.

Over the past two decades, the majority of states have enacted laws that change the status of marijuana. According to the National Conference of State Legislatures, 36 states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands allow for medical use of cannabis products and 18 states, the District of Columbia, and two territories have approved nonmedical cannabis use for adults (National Conference of State Legislatures, n.d.). These changes to policy at the state level are at odds with federal law, which classifies marijuana as a Schedule I drug (Drug Enforcement Administration, n.d.). Drugs in this category are regarded as dangerous, likely to be abused, and have no medical value. A recent report by the National Academies of Sciences, Engineering, and Medicine (NASEM, or the Academies) was based on the review of more than 10,700 studies on the health impacts of marijuana. The report shows there is strong evidence for various medical uses of marijuana, but it also notes that there are health concerns linked to use, including: the risk of driving while intoxicated, respiratory symptoms associated with smoking, and evidence that links frequent and/or heavy use of marijuana to schizophrenia or other psychotic disorders in people who are predisposed (National Academies of Sciences, Engineering, and Medicine [NASEM], 2017).

As the laws have changed around the use of marijuana, so have public perceptions of risk. This is particularly problematic because marijuana potency has increased dramatically over the past decades. Since 1995, the amount of tetrahydrocannabinol (THC), the main psychoactive component of marijuana, increased nearly 200% in marijuana confiscated by the Drug Enforcement Agency (ElSohly et al., 2016; NASEM, 2017). Nationally, approximately 18% of individuals aged 12 and over report past year marijuana use and 12% report past month use, while only one in five consider regular marijuana use to be a great risk (National Survey on Drug Use and Health [NSDUH], 2018-2019).

When young people use marijuana, they are doing so at a critical period of brain development. Neuroscientists have found that brain development continues through the mid-20s. The last part of the brain to develop is the prefrontal cortex, which is associated with decision-making, impulse control, risk-taking, and other executive functioning tasks (Weir, 2015). Research using brain imaging of youth show significant differences in brain development between youth who frequently use marijuana and those who abstain, even after comparing for demographic, behavioral, and other key variables (Lisdahl et al., 2013). Comparisons of cognitive functioning (IQ, memory, processing, impulse control, etc.) also reveal significant differences between youth who use marijuana and those who do not (Lisdahl et al., 2013). Early use of marijuana

(before the age of 16) has been linked to more frequent and heavier use of marijuana over time than users who began smoking later in life (Gruber et al., 2017). Several studies have also tied early marijuana use to a greater risk of becoming dependent on other substances later in life (NASEM, 2017).

Similar to other aspects of behavioral health, there is concern regarding how the COVID-19 pandemic may have affected marijuana use. Despite social distancing measures, Monitoring the Future data indicate that although there was a perceived decrease in availability of marijuana, youth prevalence rates for marijuana as well as alcohol remained stable among high school teens in the U.S. during this time (Miech et al., 2021). Among college age youth, these are the highest levels recorded by the survey since the 1980s (National Institute on Drug Abuse, 2021). A rapid response study conducted in the Netherlands among self-identified cannabis users showed an increase in both frequency and quantity of use during the country's lockdown (van Laar et al., 2020). It is too soon to know how pervasive these trends may be or how pandemic-related challenges to prevention programs and treatment may impact consumption patterns over time.

Delaware Overview

Delaware School Survey (DSS) data continues to show that the perception of risk has declined among youth since 1999, when half of 11th graders and 60% of 8th graders perceived a great risk in using marijuana regularly. By 2019 the rate of 11th graders who perceived regular use as great risk had dropped to 23%. By 2020, only one in three 8th graders perceived great risk in regular use. Marijuana remains a popular substance for youth; trends in past-month use among Delaware students have remained relatively stable in recent years. In 2019, 24% of 11th grade students reported past month use and an average age of first use of 15.2 years (Center for Drug and Health Studies, 2020). Eighth grade students responding to the 2020 DSS reported the age of first use as 12.3 years of age, a 15% lifetime rate of use, 12% rate of past year use, and 7% rate of past month use. Two percent reported heavy use (defined as using marijuana six times or more in the previous month).

Increasingly, youth are finding alternate ways to ingest marijuana other than smoking, including consuming edibles and concentrates, and vaping. Because vaping eliminates much of the strong odor associated with the use of marijuana and many vape devices are small and easy to hide, there may now be a greater potential for use in schools and other settings where smoking marijuana would previously have been harder to conceal. The same concerns are also relevant for marijuana edibles. In 2020, 4% of 8th graders reported smoking marijuana, 2% reported vaping it, and 2% reported using edibles (DSS, 2020).

Youth who drive while under the influence of marijuana put themselves and others in danger. Fourteen percent of 11th graders responding to the 2019 DSS reported that at some point in

their lives they had driven a car after smoking marijuana, and 7% reported that they had done so in the month prior to taking the survey (Center for Drug and Health Studies, 2020).

As the National Survey of Drug Use and Health (NSDUH) charts indicate, Delawareans use marijuana at slightly higher rates than the national average. This is particularly true among young adults aged 18 to 25, who reported a past year use rate of 41% and a monthly rate of nearly 27%. The Treatment Episode Data Set (TEDS) tracking system indicates that marijuana was listed as the primary substance in approximately 8% of all publicly funded treatment admissions in Delaware in 2019, and 22% of admissions among those aged 21 to 25 (more detailed TEDS data can be found in Chapter 6 of this report).

Delaware allows medical marijuana for specific conditions. It has also decriminalized the possession of small amounts of nonmedical marijuana; if someone is in possession of less than one ounce of marijuana, they will pay a $100 fine rather than face arrest and prosecution (Delaware Code, n.d.). In March 2021, House Bill 150 was introduced to allow adults age 21 and over to legally possess, for personal use, under one ounce of marijuana. The legislation was voted out of Committee and is on the Ready List with the potential to be taken up in the next legislative session that will begin in January 2022.

Data in Action: Marijuana Use During the COVID-19 Pandemic

As a response to the coronavirus pandemic, many local and state governments in the U.S. enacted stay-at-home orders to attempt to curb the spread of the virus. As a result, a number of individuals have experienced increased isolation, unemployment, and difficulty accessing healthcare and support networks. Mental health has been a primary concern throughout the pandemic as many people have reported increased mental distress, such as anxiety, depression, and self-isolation (Horigian et al., 2020; Czeisler et al., 2020; Czeisler et al., 2021). To cope with stress and uncertainty, some use marijuana, either recreationally or for medical purposes. Studies reflect an increase in marijuana consumption in the U.S. in the early phase of the pandemic (The Economist, 2020; Vidot et al., 2020), and a spike in marijuana sales at the start of the pandemic across hundreds of dispensaries in the U.S, which were classified as "essential" businesses (Banzali, 2021).

People with underlying medical conditions have been advised by the CDC to take special precautions in avoiding exposure to COVID-19 due to being at increased risk for severe health complications. One such group includes individuals who use medicinal cannabis to address an underlying health condition. This presents a paradox with regards to maintaining physical and mental health during the pandemic. In addition to increased risk due to underlying health conditions, certain cannabis consumption methods such as smoking and vaping, as well as marijuana sharing habits, increase risk for contracting and spreading COVID-19. Vidot and colleagues (2020) found that over 40% of adult medical cannabis users reported an increase in consumption in the early days of the pandemic. The same study indicated that use of edible and tincture consumption of marijuana increased while smoking and vaping methods decreased among the respondents (Vidot et al., 2020).

While these increases in use and risk behaviors reflect an early response to the pandemic, it will be important to monitor whether these trends continue throughout the U.S., particularly as more individuals receive COVID-19 vaccines and social gatherings resume.

National Survey on Drug Use and Health
Marijuana Use and Perception of Risk in Delaware by Age Group, 2018-2019[a] (annual average percentages)

Measure	Total 12 or Older	AGE GROUP		
		12-17	18-25	26 or Older
Past Year Marijuana Use	18.18	14.43	41.57	15.29
Past Month Marijuana Use	12.26	8.26	27.58	10.53
Perceived of Great Risk of Smoking Marijuana Once a Month	21.76	21.60	9.51	23.51

Figure 59: Marijuana use, past year, past month, perceived risk, by age group

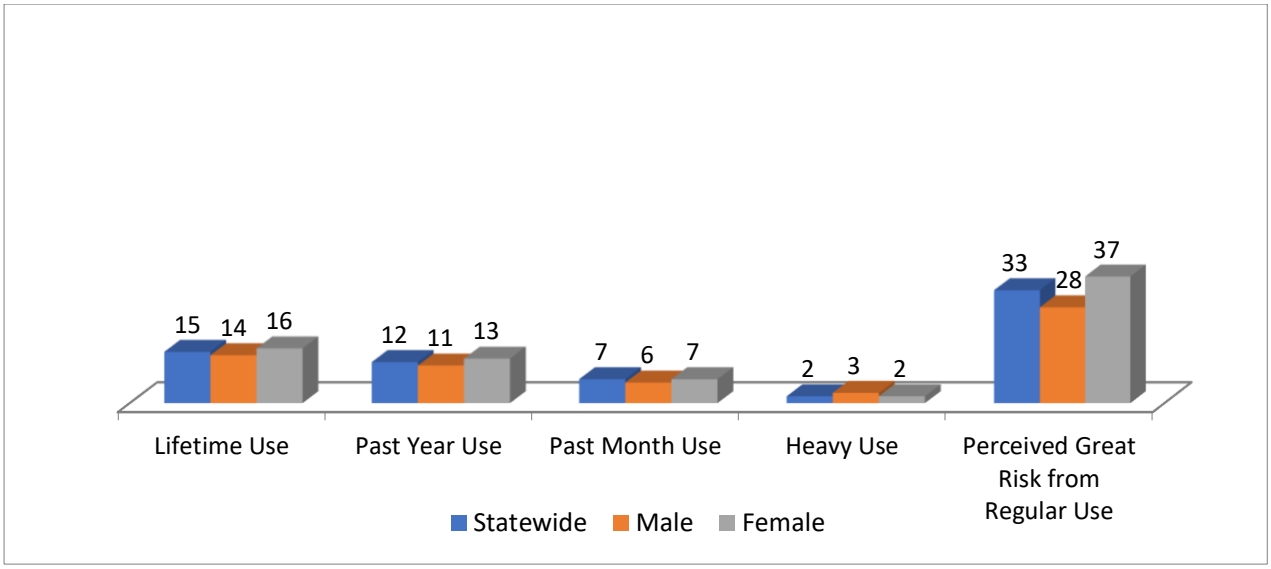
Note:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

2020 Delaware School Survey
Marijuana Use among Delaware 8th Graders
(in percentages)



	Lifetime Use	Past Year Use	Past Month Use	Heavy Use[a]	Perceived Great Risk from Regular[b] Use
Statewide	15	12	7	2	33
Male	14*	11	6*	3*	28
Female	16*	13	7*	2*	37

Figure 60: Marijuana use, 8th graders

Notes:
[a] "Heavy Use" indicates more than six times in the past month.
[b] "Regular use" is self-defined in the survey.
* Estimates were not statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey

Students' Average Age of Onset[1] for Marijuana Use

8TH Grade	11th Grade
12.3 years	-

Figure 61: Average age of onset for marijuana use, 8th

2020 Delaware School Survey

Method of Consumption for Past Month Marijuana Use (in percentages)

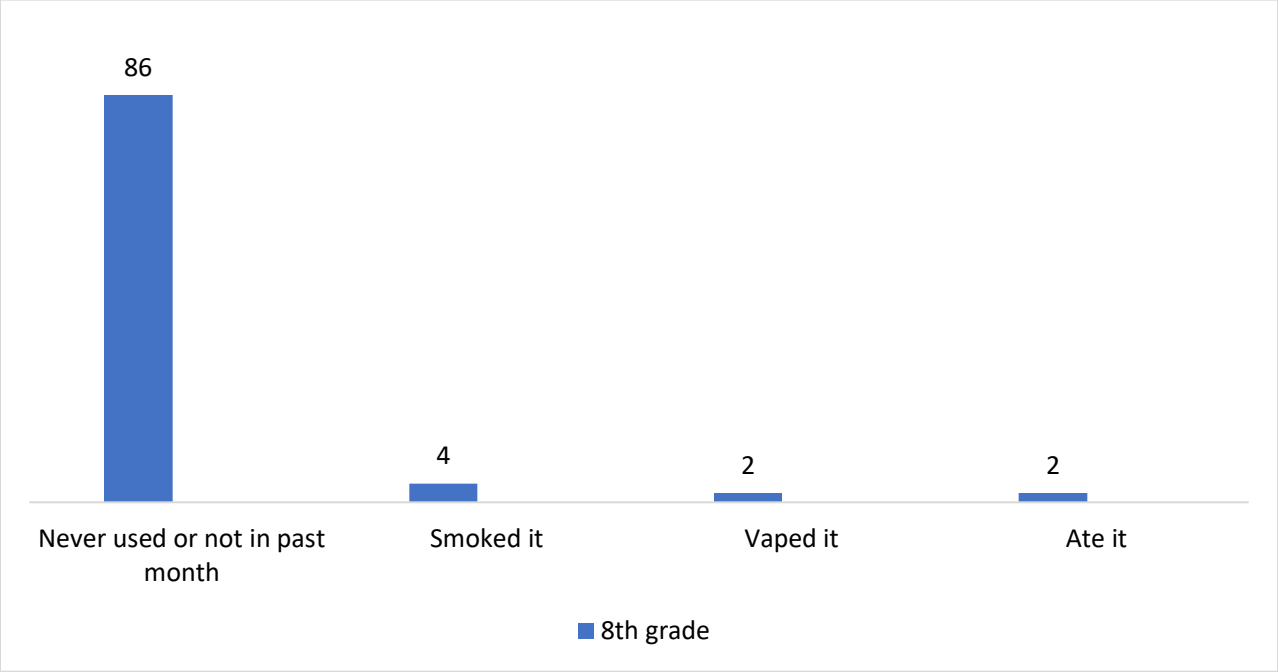


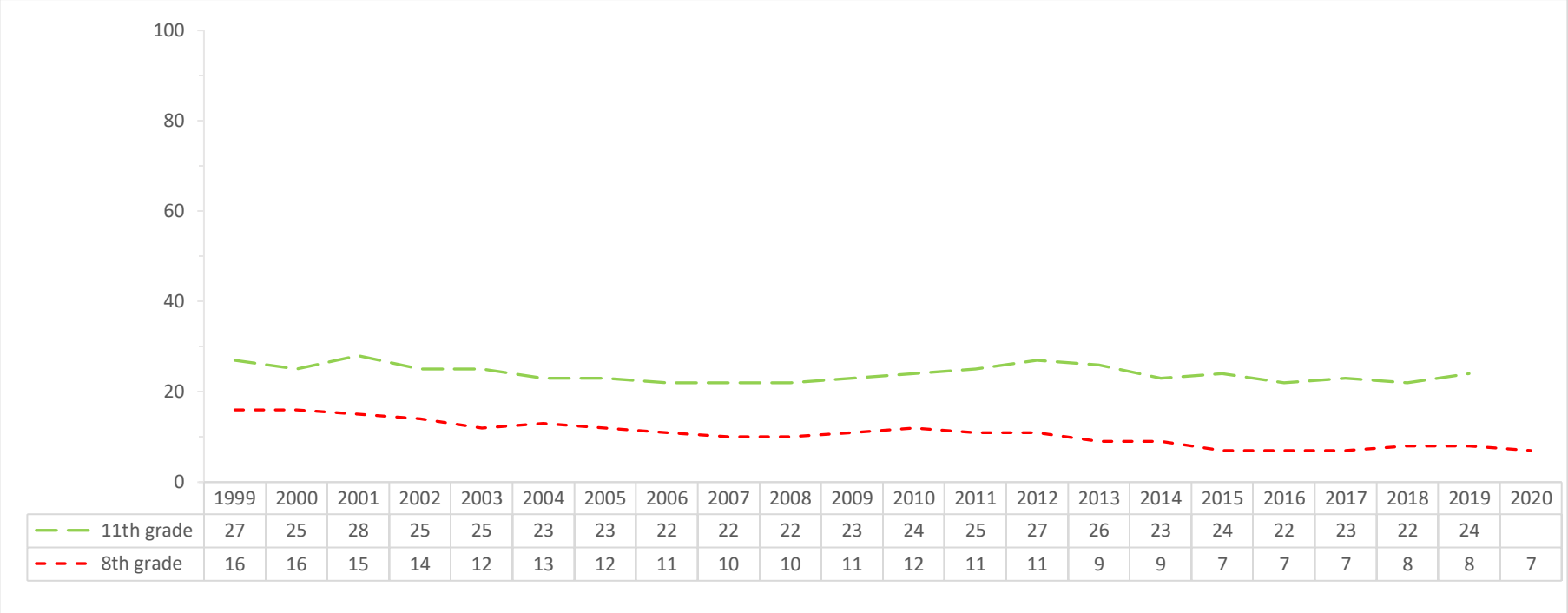
Figure 62: Method of consumption for marijuana, 8th grade

Notes:
[1] Average age of onset is calculated among students who report ever using marijuana.
*In 2020, Delaware School Survey data was unavailable for 11th grade students
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware School Survey

Trends in Delaware Students' Past Month Marijuana Use by Grade, 1999-Present (in percentages)



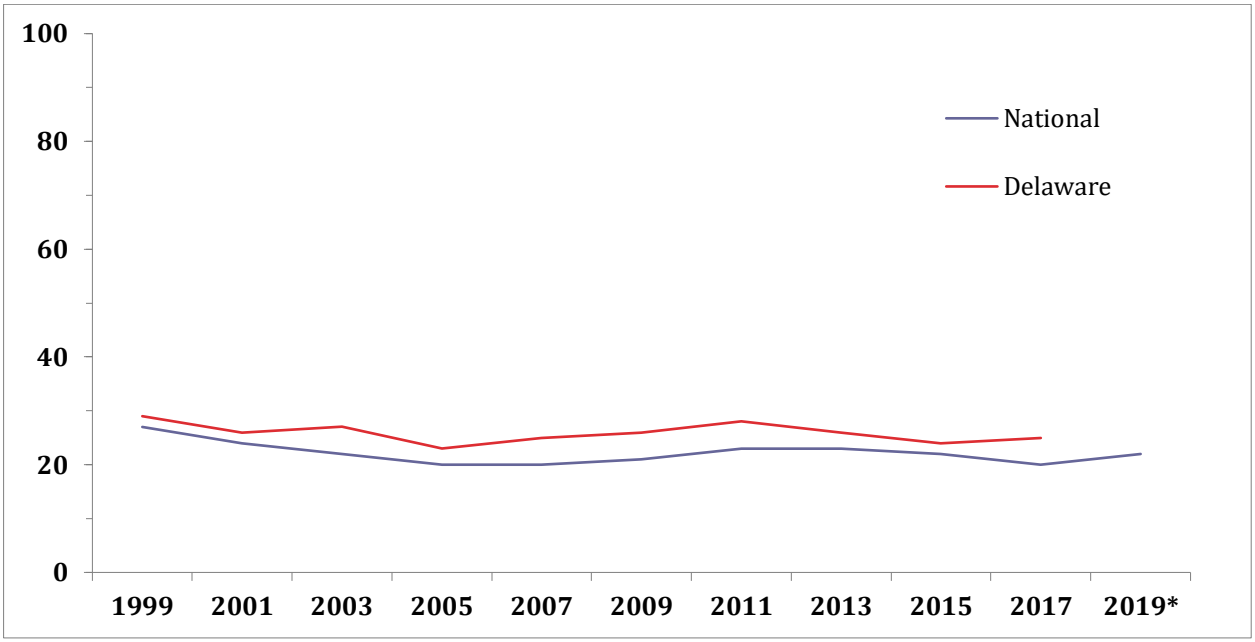
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th grade	27	25	28	25	25	23	23	22	22	22	23	24	25	27	26	23	24	22	23	22	24	
8th grade	16	16	15	14	12	13	12	11	10	10	11	12	11	11	9	9	7	7	7	8	8	7

Figure 63: Trends in past month marijuana use, 8th and 11th grade

Notes:
These statistics contribute to the National Outcome Measures (NOMs).
11th grade data not available for the 2020 Delaware School Survey.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Youth Risk Behavior Survey
National and Delaware, 1999-2019
Trends in High School Students' Past Month Use of Marijuana
(in percentages)



Year	National	Delaware
1999	27	29
2001	24	26
2003	22	27
2005	20	23
2007	20	25
2009	21	26
2011	23	28
2013	23	26
2015	22	23
2017	20	26
2019*	22	-

Figure 64: Trends in marijuana use, past month, HS

Notes:
*National YRBS data is weighted, Delaware YRBS data weighted except for in 2019, which is unavailable.
Sources: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

National Survey on Drug Use and Health
Past Year Marijuana Use by Age Group and Region
2017-2018 and 2018-2019 NSDUH
(in percentages) [a]

AGE GROUP (Years)												
	12 or Older			12-17			18-25			26 or Older		
State	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	15.47	16.71	.000	12.45	12.84	.118	34.80	35.09	.443	12.73	14.27	.000
Northeast	15.97	17.70	.000	13.00	13.30	.478	38.99	39.12	.862	12.69	14.88	.000
Delaware	17.11	18.18	.156	14.03	14.43	.722	41.09	41.57	.817	13.97	15.29	.133

Figure 65: Marijuana use, past year, by age group and region

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

National Survey on Drug Use and Health
Past Month Marijuana Use by Age Group and Region
2017-2018 and 2018-2019
(in percentages) [a]

	AGE GROUP (Years)											
	12 or Older			12-17			18-25			26 or Older		
State	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	9.83	10.80	.000	6.56	7.02	.012	22.12	22.54	.187	8.25	9.39	.000
Northeast	10.25	11.42	.000	6.82	7.37	.065	24.74	24.88	.834	8.35	9.78	.000
Delaware	11.16	12.26	.106	8.19	8.26	.924	26.72	27.58	.615	9.22	10.53	.102

Figure 66: Marijuana use, past month, by age group and region

Notes:

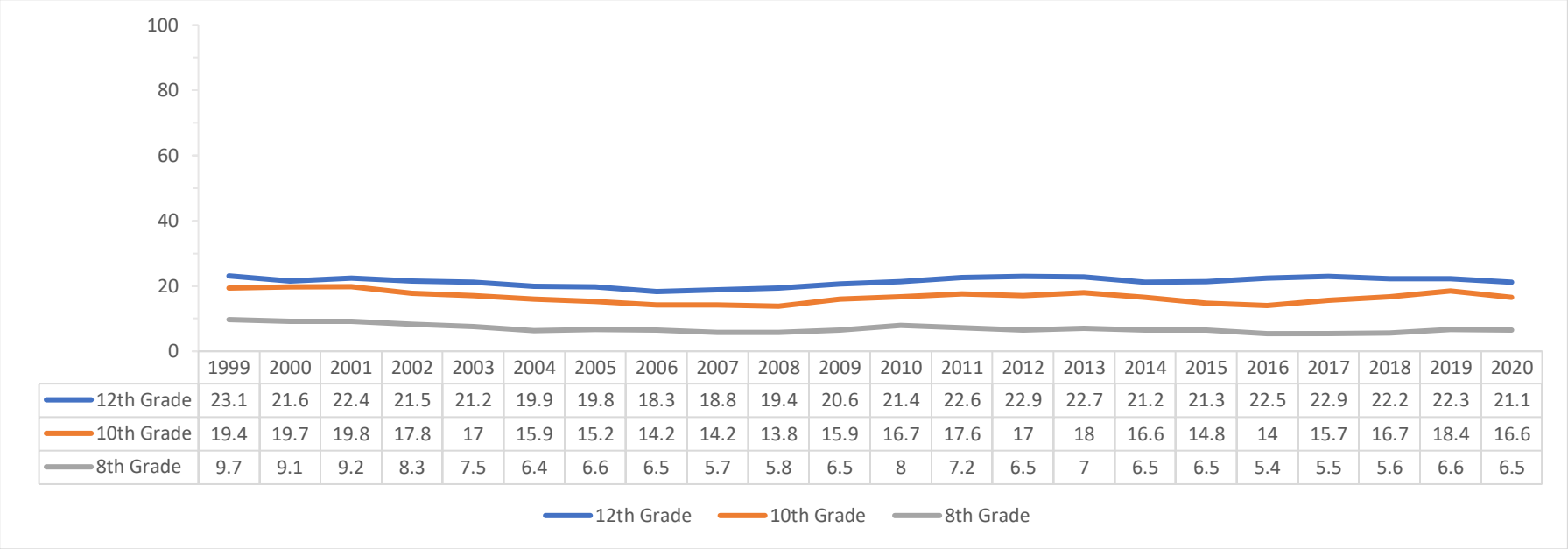
[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

Monitoring the Future
National Trends in Past Month Marijuana Use among 8th, 10th, and 12th grade students, 1999-2020 (in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	23.1	21.6	22.4	21.5	21.2	19.9	19.8	18.3	18.8	19.4	20.6	21.4	22.6	22.9	22.7	21.2	21.3	22.5	22.9	22.2	22.3	21.1
10th Grade	19.4	19.7	19.8	17.8	17	15.9	15.2	14.2	14.2	13.8	15.9	16.7	17.6	17	18	16.6	14.8	14	15.7	16.7	18.4	16.6
8th Grade	9.7	9.1	9.2	8.3	7.5	6.4	6.6	6.5	5.7	5.8	6.5	8	7.2	6.5	7	6.5	6.5	5.4	5.5	5.6	6.6	6.5

Figure 67: National trends in past month marijuana use, 8th, 10th, 12th grade

Sources: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future Study (MTF), University of Michigan.

Back to table of figures

Delaware School Survey

Trends in 5th Graders' Perception of "a Lot of Risk" in Using Marijuana Weekly, 1999-2019 (in percentages)

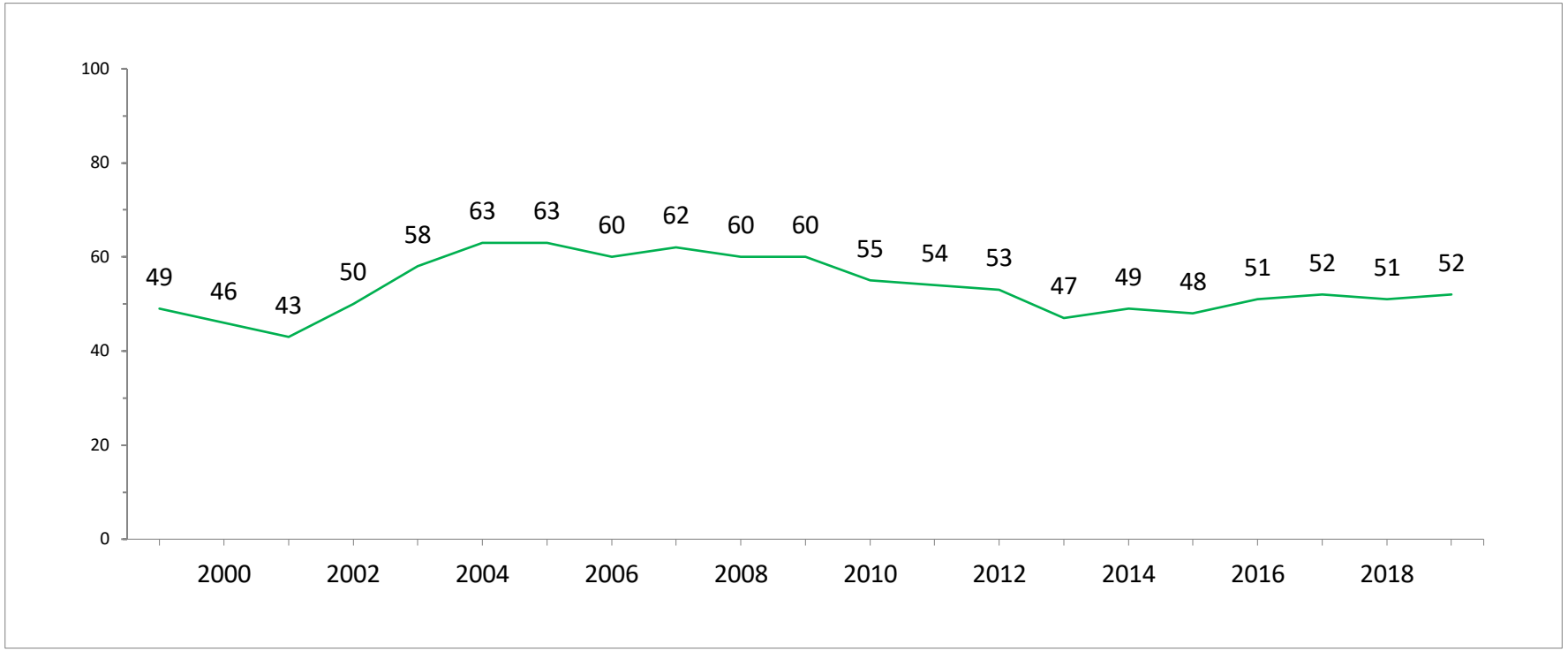


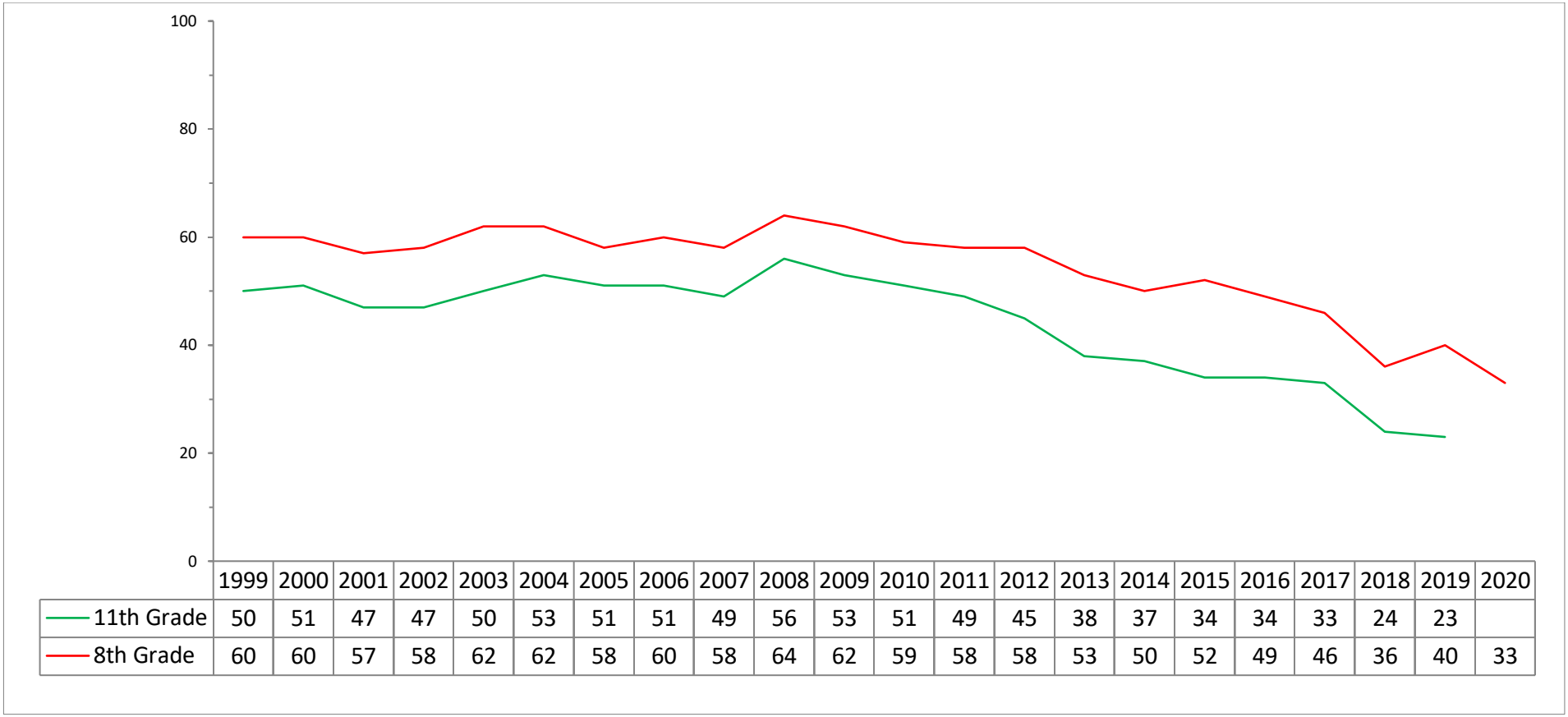
Figure 68: Trends in perception, "lot of risk" using marijuana weekly, 5th grade

Note: In 2020, Delaware School Survey data was unavailable for 5th grade students.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: 5th Grade* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware School Survey

Trends in 8th and 11th Graders' Perceptions of "Great Risk" in Using Marijuana Regularly, 1999-2020[a] (in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th Grade	50	51	47	47	50	53	51	51	49	56	53	51	49	45	38	37	34	34	33	24	23	
8th Grade	60	60	57	58	62	62	58	60	58	64	62	59	58	58	53	50	52	49	46	36	40	33

Figure 69: Trends in perception, "great risk" using marijuana regularly

Note:

[a] "Regularly" is self-defined in the survey.

* In 2020, Delaware School Survey data was not available for 11th grade data students

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

National Survey on Drug Use and Health
Perceptions of "Great Risk" in Smoking Marijuana Once a Month
by Age Group and Region
2017-2018 and 2018-2019
(in percentages) [a]

	Age Group (Years)											
	12 or Older			12-17			18-25			26 or Older		
State	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	25.54	24.39	.000	23.61	22.67	.003	12.14	11.87	.278	27.92	26.56	.000
Northeast	24.58	23.78	.053	23.23	22.71	.344	11.42	11.59	.686	26.80	25.78	.046
Delaware	21.60	21.76	.883	22.00	21.60	.787	10.54	9.51	.276	23.17	23.51	.799

Figure 70: Perception of "great risk" in smoking marijuana once a month, by age and region

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

Delaware School Survey
Trends in Delaware
11th Graders Who Reported Smoking
Marijuana and Driving in the Past Month, 1999-2019
(in percentages)

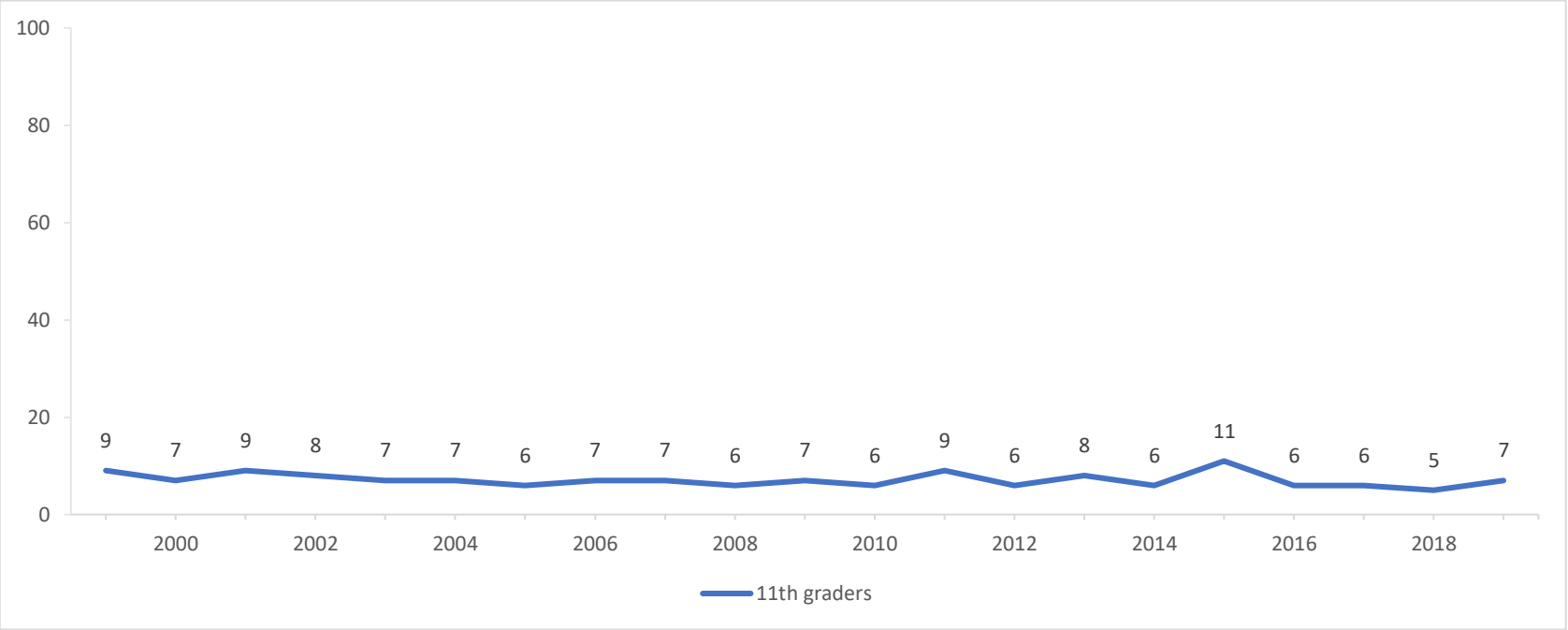


Figure 71: Trends, smoking marijuana & driving, 11th graders

Note: In 2020, Delaware School Survey data was unavailable for 11th grade students.
Source: Center for Drug & Health Studies. (2019). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

5. **Opioid Use**

National Overview

The most recent CDC overdose death rate estimate for Delaware is 48 per 100,000 residents, second highest among all states. According to the Delaware Division of Forensic Science, opioids such as fentanyl and heroin are commonly identified substances in overdose deaths.

On a positive note, the rate of Delawareans filling opioid prescriptions has continued to decline since 2015, from 204 to 120 per 1,000 people.

The opioid class of drugs includes prescription painkillers such as morphine, hydrocodone, and oxycodone, as well as heroin. Opioids can be highly addictive and potent; their use may lead to tragic outcomes including drug overdose deaths, infants born with neonatal abstinence syndrome, challenges in maintaining personal relationships, and challenges meeting educational or employment goals. Changes in opioid prescribing practices beginning in the 1990s contributed to increased accessibility and use of these drugs. The resulting rise in opioid use has led to alarming increases in overdose death rates across the country in what is now known as the opioid epidemic (Jones et al., 2018). Societal costs associated with this public health crisis are staggering. A study published in 2016 by researchers at the Centers for Disease Control and Prevention (CDC) estimates the annual economic burden of the opioid epidemic at $78.5 billion (Florence et al., 2016). According to results from the 2019 National Survey of Drug Use and Health (NSDUH), prescription pain relievers were the second most commonly misused illicit drugs after marijuana (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). NSDUH findings also estimate that 10.1 million people aged 12 and over misused opioids (including heroin as well as prescription pain relievers) within the year before the survey (SAMHSA, 2020).

Deaths due to drug overdoses have increased in the U.S. over the past two decades. In 2019, there were 49,860 overdose deaths involving opioids (Centers for Disease Control and Prevention, n.d.). Overdose deaths involving synthetic opioids (except methadone), such as fentanyl, continued to rise dramatically to an age-adjusted rate of 11.4 per 100,000 of population in 2019. Fortunately, that rate of increase has slowed in recent years (Hedegaard, Minino, & Warner, 2020; NIDA, 2020). The age-adjusted overdose death rate involving heroin was 4.4 per 100,000 of population the same year representing a slight decline from 4.7 per 100,000 in 2018 (Hedegaard, Minino, & Warner, 2020; NIDA, 2020).

Fentanyl, a powerful, synthetic opioid often prescribed to patients during end-of-life care or with advanced cancer, is increasingly accessible to users. In recent years, the prevalence of

fentanyl has increased dramatically. Much of the fentanyl on the street has been illegally imported from China or illegally manufactured in China, the U.S., and Mexico, and is not derived from pharmaceutical supplies. The CDC reports that fentanyl is 50 times more potent than heroin and is commonly mixed with heroin or cocaine, often with deadly results. The Drug Enforcement Administration reports a troubling trend of illegally manufactured pills inscribed with prescription brand names that are primarily made with fentanyl that can result in overdose (Drug Enforcement Administration [DEA], 2019). The 2020 National Drug Threat Assessment reports that fentanyl availability remains high in the U.S. and increased in 2019 (DEA, 2021).[14]

The risk of overdose also increases when opioids are used at the same time with other substances, such as benzodiazepine medications (e.g., Valium or Xanax). Methadone, oxycodone, and hydrocodone are the drugs most often attributed to overdose in this category. Significantly rethinking prescribing practice and policy should have an effect on the number of people who misuse and overdose on prescription opioids, as well as reduce the number of people transitioning to dangerous, illicit opioid use.

There has been a substantial rise in overdose deaths involving opioids with the use of cocaine and/or other psychostimulants. The age-adjusted rate of overdose involving both opioids and psychostimulants rose from 0.3 per 100,000 population in 2013 to 2.8 in 2019 (Hedegaard, Minino, & Warner, 2021).

Additional health complications can arise from the misuse of opioids. People who inject drugs and share or reuse needles risk spreading infectious diseases such as human immunodeficiency virus (HIV) and hepatitis C, in addition to other health complications. In response, many communities and states have enacted needle-exchange programs that allow drug users to drop off used needles and receive either free or reduced-cost needles. In addition, many of these programs provide resources about substance use disorder treatment, infectious disease control, and other health information.

Neonatal abstinence syndrome (NAS) is another public health concern linked to the use of opioids. Between 1999 and 2013, a study of 28 states found more than a 300% increase in the number of babies born with NAS (Ko et al., 2016). Babies born with this condition experience symptoms of withdrawal that complicate regular, healthy development and often lead to additional time spent in the hospital after delivery. Infants born to mothers who use opioids are at higher risk of smaller birth weight, birth defects, difficulty feeding, developmental delays,

[14] In the same report, the DEA also notes that seven of its field divisions reported that the availability of fentanyl had decreased by June 2020, while 10 field divisions reported price increases for heroin. The agency suggests that these fluctuations may be related to the pandemic and supply uncertainty due to state lockdowns, border restrictions, and other factors.

future behavioral problems, and sudden infant death syndrome (DHSS, 2016). For pregnant women with opioid dependency, medication-assisted treatment remains the recommended therapy to improve health outcomes for both the mother and child (American College of Obstetricians and Gynecologists (ACOG], 2017).

Delaware Overview

Delaware has been hit hard by the opioid epidemic. The CDC estimates Delaware's 2019 drug overdose mortality rate as 48 deaths per 100,000 residents, (CDC, n.d.), ranking second among the states and substantially higher than the national rate of 21.6 deaths per 100,000 (Hedegaard, Minino, & Warner, 2020). In 2020, fentanyl was identified in 372 of 447 overdose deaths and 94 involved heroin (Delaware Division of Forensic Science, 2021). In 2018, Delaware emergency responders administered 3,728 doses of naloxone, the opioid antagonist which can reverse the effects of opioid overdose and potentially save lives. This represents an increase of 30% from doses administered in the previous year (Delaware Department of Health and Social Services, 2019).

Almost half of individuals admitted to publicly funded treatment programs in Delaware in 2019 listed heroin as their primary drug. An additional 7% of treatment admissions were primarily attributed to use of other opiates (Treatment Episode Data Set, 2019).

The Prescription Monitoring Program (PMP) in Delaware records information on all prescriptions for controlled substances, with the goal of reducing the misuse of prescription drugs and improving patient care. These data can help to identify "pill mills" (doctors who prescribe disproportionate amounts of opioids to patients) as well as "doctor shoppers" (individuals who change doctors frequently to obtain prescribed opioids). These data can also help doctors identify whether patients are already taking prescriptions that may interfere with opioids, such as benzodiazepines. University of Delaware researchers have analyzed this data to create hotspot maps identifying areas in the state with higher rates of opioid prescriptions to help reduce the flow of pills to recreational users (Center for Drug and Health Studies [CDHS], 2017). Delaware has already made some progress in targeting pill mills; early in 2017, three doctors in Delaware were sanctioned as a result of over-prescribing (Goss, 2017). On a positive note, the rate of Delawareans filling opioid prescriptions has continued to decline since 2015, when it was 204 per 1,000 people to the 2020 rate of 120 per 1,000. Additionally, the rates of instant relief and high-dose opioid prescriptions being filled have declined since 2012 (Delaware Department of Health and Social Services, n.d.).

Data from the 2018-2019 NSDUH estimate that 3.45% of all Delawareans aged 12 and older and 3.28% of adults aged 26 and older have misused prescription pain relievers in the past year. The highest rate of misuse occurs among adults aged 18 to 25 (5.43%). These figures are comparable to national averages.

The 2020 Delaware School Survey data show that approximately 4% of 8th grade students report rates of lifetime misuse of prescription pain medications, a past year misuse rate of 3%,

and a past month misuse rate of 2%. Results from the same survey indicate that less than half (46%) of 8th graders perceive a great risk in misusing pain medications in ways other than prescribed. The 2019 Middle School Youth Risk Behavior Survey (YRBS) results show an increase in the rate of misuse between 2017 and 2019 from 2.5 to 3.5%, which should be monitored.

In 2020, there were 702 cases of infants with prenatal substance exposure (IPSE) reported in Delaware (Parker and Donahue, 2020), many of whom were exposed to opioids. (The topic of IPSE is discussed in more detail in Chapter 7 of this report.)

Although Delaware continues to experience the impact of the opioid crisis, a policy analysis recently conducted by the National Safety Council indicates that the state has made progress in five of six key actions needed to end the opioid crisis: mandating prescriber education; implementing prescriber guidelines; implementing prescription drug monitoring programs; treating opioid overdoses; and increasing availability of opioid use disorder treatment (National Safety Council, 2018).

Data in Action: Overdose Deaths During the Pandemic

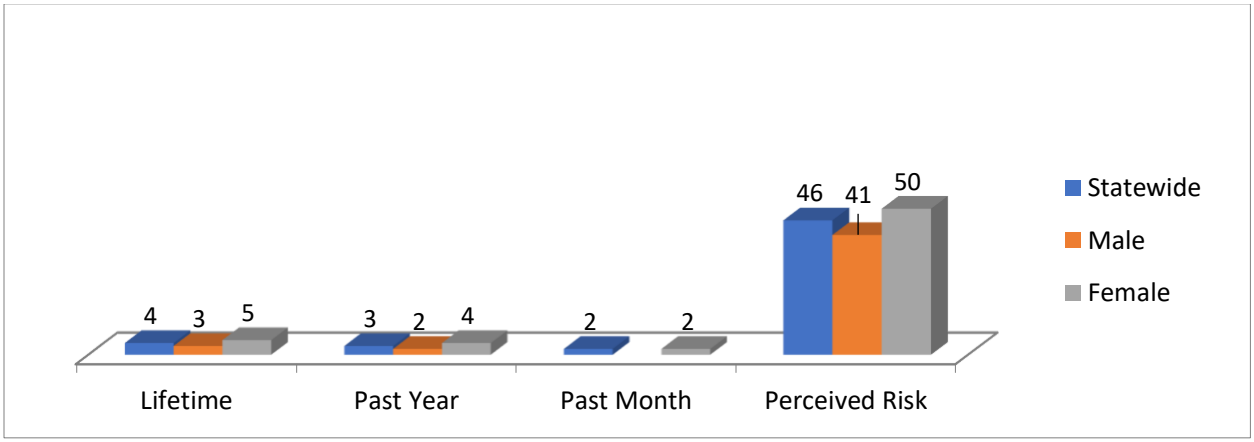
The pandemic has created conditions that can cause individuals with a substance use disorder to experience greater challenges than normal to their health and wellbeing. They may have decreased access to healthcare and housing and may be more vulnerable to exposure to COVID-19. The pandemic has produced other social conditions such as economic instability, social isolation, and mental health concerns that may contribute to vulnerability for substance misuse and overdose (Baumgartner and Radley, 2021).

The pandemic has also raised concerns regarding accessibility to medication-assisted treatment (MAT), with potential negative consequences for persons with substance use disorders. Since many stay-at-home orders were issued throughout the U.S. to slow the spread of the novel coronavirus and limit in person interactions, many MAT protocols and regulations also required changes (Partnership to End Addiction, 2020). In March of 2020, the Substance Abuse and Mental Health Services Administration (SAMHSA) eased some restrictions on MAT for opioids to reduce the number of in person visits for patients during the pandemic (SAMHSA, 2020). DEA-registered practitioners in the U.S. were permitted to issue prescriptions to patients, even if they had not conducted a face-to-face evaluation, as long as certain conditions were satisfied (SUNY Upstate Medical University, 2020). However, it was discovered that while existing patients could be served remotely, new patients had difficulty accessing MAT through telehealth (Bronfeld, 2021).

In addition, the pandemic appears to be associated with a disruption in the trade of illicit drugs, such as heroin. Patients who relapse may use strong or contaminated opioids with life threatening consequences (SUNY Upstate Medical University, 2020).

These factors likely contributed to the spike in overdose deaths in the U.S., which occurred after the start of the pandemic. In December 2020, the Health Alert Network issued a notification regarding a substantial acceleration in overdose deaths, many involving fentanyl and other synthetic opioids, occurring between March 2020 and May 2020. These coincided with the early days of stay-at-home orders and other COVID-19 mitigation measures. Although at a slower than national rate, drug overdose deaths also increased in Delaware with 450 occurring in 2020 (Ahmad et al., 2021). Similar to national overdose deaths, opioids account for the majority of drug overdose deaths in Delaware. The Delaware Division of Forensic Science 2020 Annual Report indicates that 372 fatal overdoses in 2020 involved the use of fentanyl and 94 involved the use of heroin. The opioid crisis clearly remains a significant issue in Delaware, especially as the pandemic continues. Looking forward, it is necessary to continue monitoring overdose rates as well as the potential impact of COVID-19.

2020 Delaware School Survey
Reported Prescription Painkiller Misuse[a] among Delaware 8th Graders (in percentages)



	Lifetime	Past Year	Past Month	Perceived Great Risk from Using Prescription Drugs without a Prescription
STATEWIDE	4	3	2	46
Males	3	2	-	41
Females	5	4	2	50

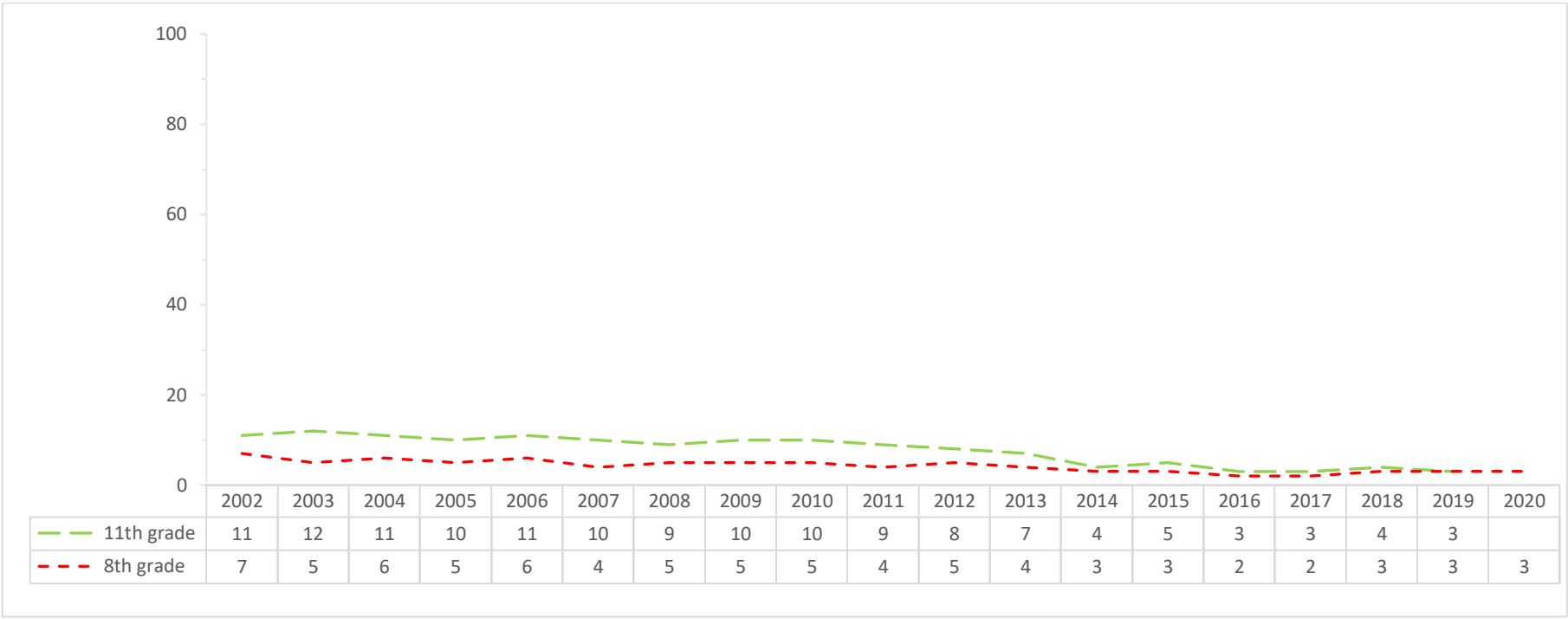
Figure 72: Prescription painkiller misuse, 8th graders

Notes:
"-" indicates that the prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
[a] Misuse is defined in the DSS as use of prescription painkillers without a doctor's prescription or in ways other than prescribed.
* Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Delaware School Survey
Trends in Past Year Misuse* of Prescription Painkillers among Delaware 8th and 11th Graders, 2002-2020 (in percentages)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11th grade	11	12	11	10	11	10	9	10	10	9	8	7	4	5	3	3	4	3	
8th grade	7	5	6	5	6	4	5	5	5	4	5	4	3	3	2	2	3	3	3

Figure 73: Trends in past year prescription painkiller misuse, 8th and 11th graders

Notes:
* Misuse is defined in the DSS as use of prescription painkillers without a doctor's prescription or in ways other than prescribed.
** In 2020, Delaware School Survey data was unavailable for 11th grade students.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2019 Middle School Youth Risk Behavior Survey

Students Who Currently Took Prescription Pain Medicine Without a Doctor's Prescription or Differently than Prescribed,* 2019

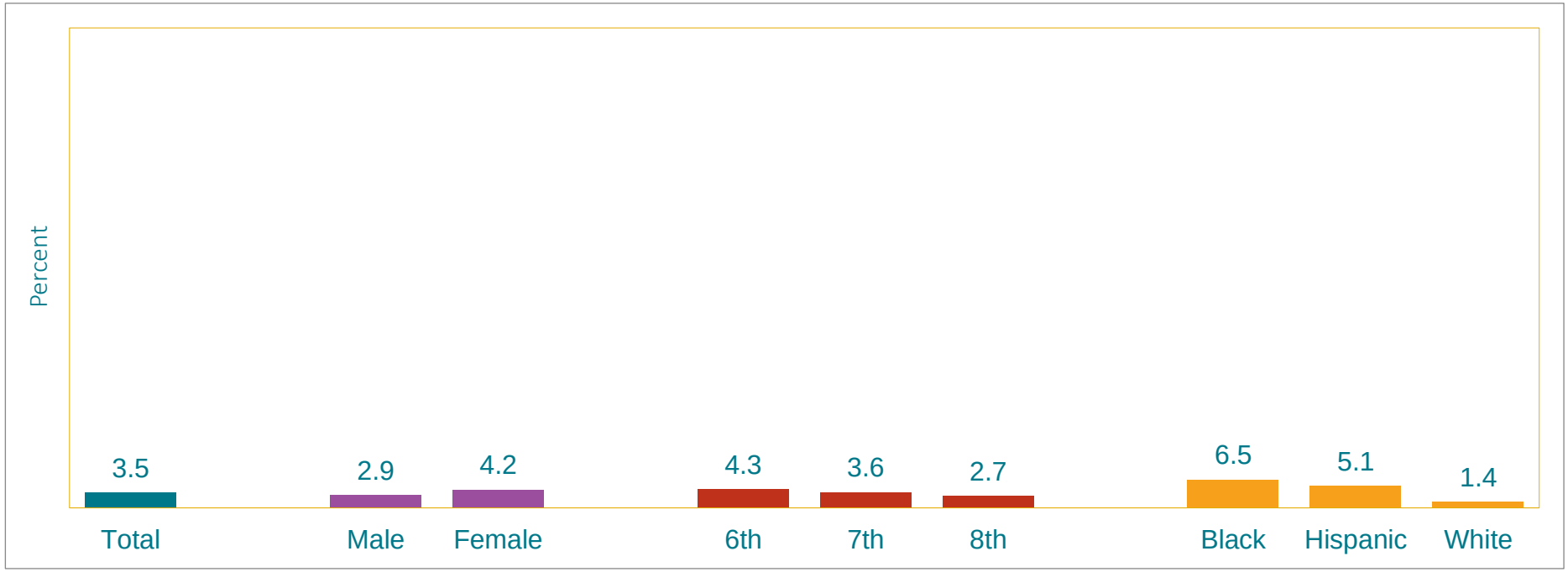


Figure 74: Students who misused prescription drugs, MS

Notes:
*Counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, during the 30 days before the survey
†B > W, H > W (Based on t-test analysis, $p < 0.05$.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
This graph contains weighted results.

Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

2019 Middle School Youth Risk Behavior Survey

Students Who Currently Took Prescription Pain Medicine Without a Doctor's Prescription or Differently than Prescribed,* 2017-2019 (in percentages)

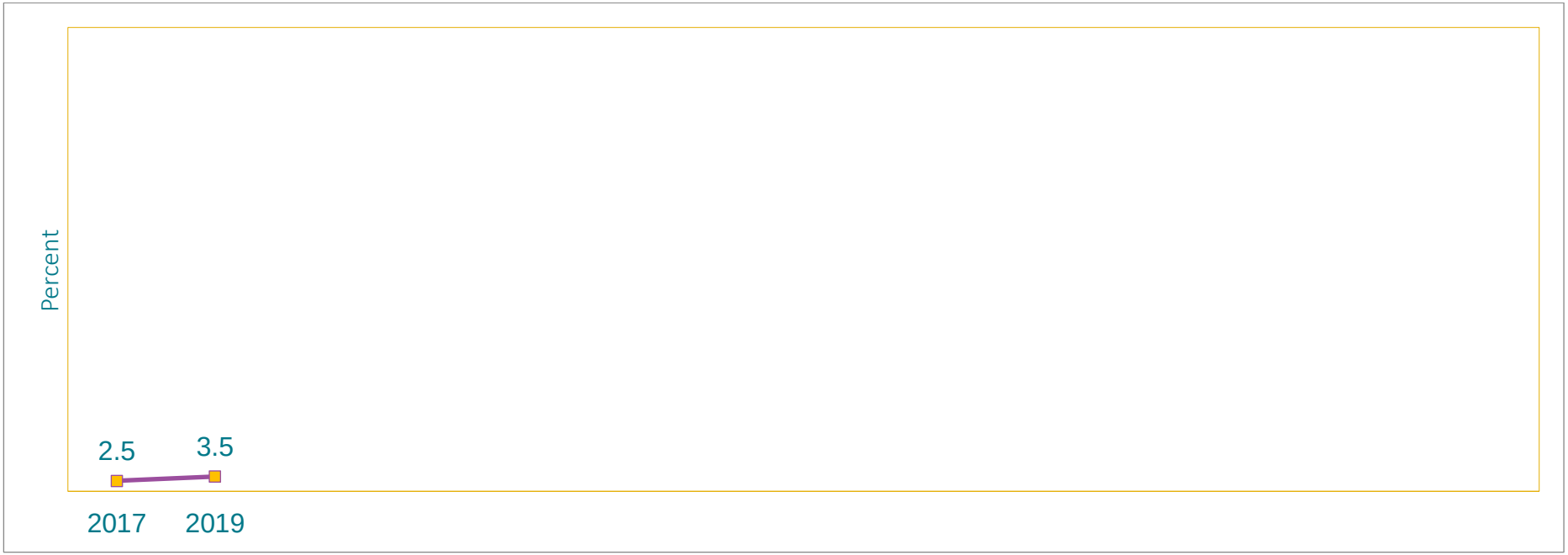


Figure 75: Trends in students who misused prescription drugs, MS

Notes:

*Counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, during the 30 days before the survey

†Increased 2017-2019 [Based on linear trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade ($p < 0.05$).]

Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

National Survey of Drug Use and Health

Pain Reliever Misuse* in Past Year, by Age Group and Region
2017-2018 and 2018-2019
(in percentages)[a]

	12 or Older			AGE GROUP (Years)								
				12-17			18-25			26 or Older		
State	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	3.85	3.58	.000	2.93	2.53	.001	6.32	5.33	.000	3.56	3.43	.114
Northeast	3.42	3.10	.014	2.27	1.90	.029	5.88	4.67	.000	3.15	2.98	.273
Delaware	3.77	3.45	.253	2.79	2.40	.252	6.85	5.43	.034	3.43	3.28	.673

Figure 76: Pain reliever misuse, past year, by age group and region

Notes:

* Misuse is defined in the NSDUH as: "use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor."

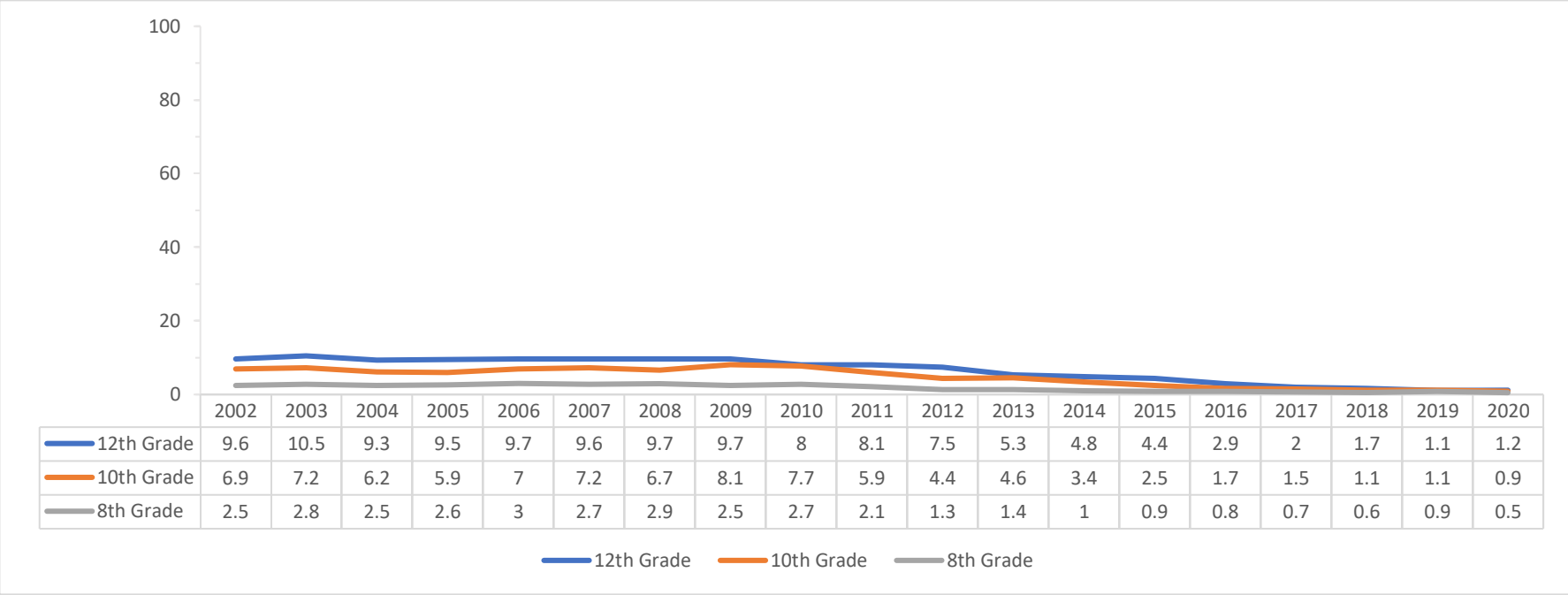
[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

Monitoring the Future
National Trends in Annual Use: Vicodin
8th, 10th, and 12th Grade
(in percentages)



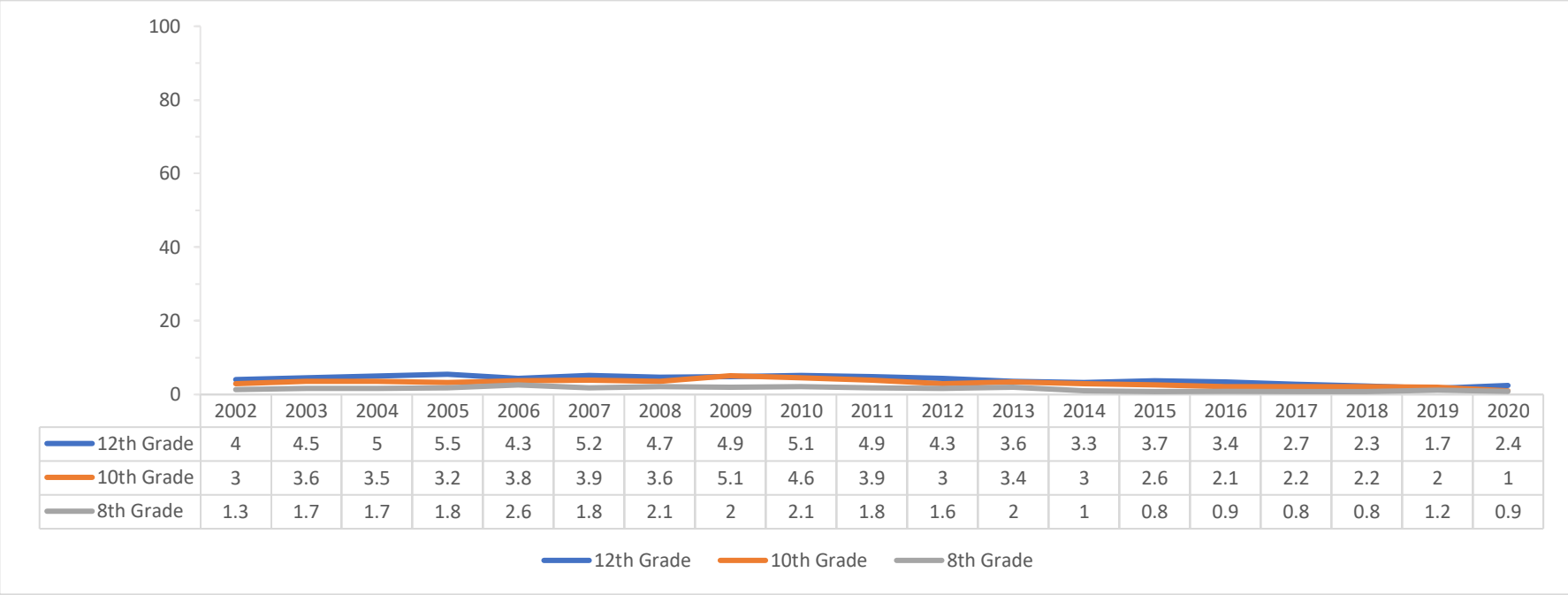
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	9.6	10.5	9.3	9.5	9.7	9.6	9.7	9.7	8	8.1	7.5	5.3	4.8	4.4	2.9	2	1.7	1.1	1.2
10th Grade	6.9	7.2	6.2	5.9	7	7.2	6.7	8.1	7.7	5.9	4.4	4.6	3.4	2.5	1.7	1.5	1.1	1.1	0.9
8th Grade	2.5	2.8	2.5	2.6	3	2.7	2.9	2.5	2.7	2.1	1.3	1.4	1	0.9	0.8	0.7	0.6	0.9	0.5

Figure 77: National trends in annual prevalence of Vicodin misuse, 8th, 10th, and 12th grade

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

Monitoring the Future
National Trends in Annual Prevalence: OxyContin
8th, 10th, and 12th Grade
(in percentages)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	4	4.5	5	5.5	4.3	5.2	4.7	4.9	5.1	4.9	4.3	3.6	3.3	3.7	3.4	2.7	2.3	1.7	2.4
10th Grade	3	3.6	3.5	3.2	3.8	3.9	3.6	5.1	4.6	3.9	3	3.4	3	2.6	2.1	2.2	2.2	2	1
8th Grade	1.3	1.7	1.7	1.8	2.6	1.8	2.1	2	2.1	1.8	1.6	2	1	0.8	0.9	0.8	0.8	1.2	0.9

Figure 78: National trends in annual prevalence of OxyContin misuse, 8th, 10th, and 12th grade

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

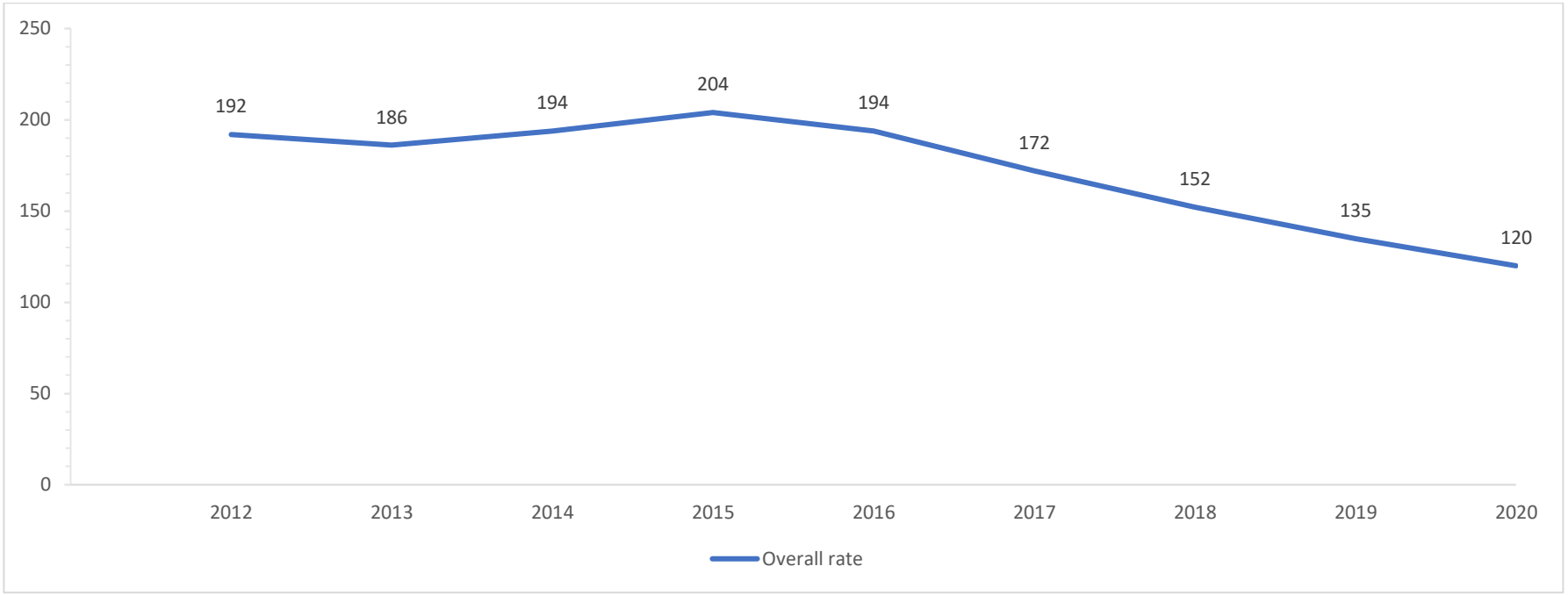


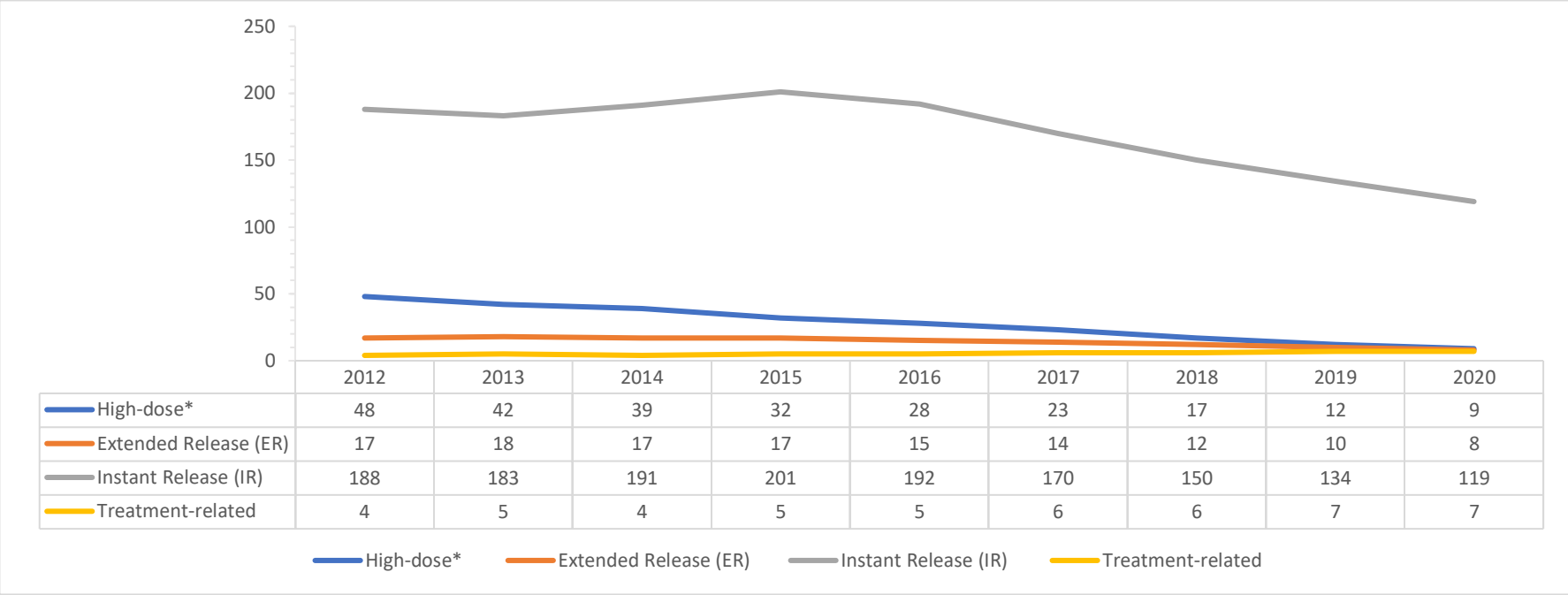
Figure 79: Trends in people filling opioid prescriptions in Delaware, any opioid prescription

Source: Data collected for the Delaware Prescription Monitoring Program (PMP) and reported on the Delaware Department of Health and Social Services My Healthy Community Data Dashboard.

Back to table of figures

Delaware Prescription Monitoring Program, 2012-2020

Trends in People Filling Opioid Prescriptions in Delaware, by Prescription Category (as a rate per 1,000 people)



	2012	2013	2014	2015	2016	2017	2018	2019	2020
High-dose*	48	42	39	32	28	23	17	12	9
Extended Release (ER)	17	18	17	17	15	14	12	10	8
Instant Release (IR)	188	183	191	201	192	170	150	134	119
Treatment-related	4	5	4	5	5	6	6	7	7

Figure 80: Trends in people filling opioid prescriptions in Delaware, by prescription category

Note:
* High-dose refers to prescriptions of greater than or equal to 90 MMEs (Morphine Milligram Equivalents).
Source: Data collected by the Delaware Prescription Monitoring Program (PMP) and reported on the Delaware Department of Health and Social Services My Healthy Community Data Dashboard.

Back to table of figures

6. **Other Illegal Drugs**

National Overview

4% of Delawareans aged 12 and over report using an illicit drug other than marijuana in the past month, and 2.21% report using cocaine in the past year.

Less than half (46%) of Delaware 8th graders perceive a great risk of harm in misusing prescription medications.

The substance use rates examined in this report focus primarily on the four most commonly used substances in Delaware today (tobacco, alcohol, marijuana, and opioids). However, many other illicit and prescription drugs are also misused. This list of examples is not exhaustive:

- Depressants: barbiturates, benzodiazepines, gamma hydroxybutyrate (GHB), Rohypnol
- Stimulants: cocaine, methamphetamine, Adderall, Ritalin
- Hallucinogens: lysergic acid diethylamide (LSD), mescaline, salvia, “mushrooms”
- New psychoactive substances (NPS): synthetic cannabinoids
- Other drugs: ecstasy, ketamine, bath salts, dextromethorphan (DXM), steroids, inhalants

These substances have less public health implications than tobacco, alcohol, marijuana, and opioids, not because they are less dangerous, but because they impact a smaller population of people. Use of these substances comes with steep risks, including the potential for: overdose; addiction; the drug to be mixed with other dangerous products (such as fentanyl in cocaine); drug interactions; and serious mental impairment that may lead to the increased likelihood of victimization, physical altercations, dangerous accidents, and/or criminal behavior.

Crack/cocaine has particularly troubling health implications. Cocaine is very addictive and may lead to various long-term health concerns as well as possible overdose. According to the U.S. Centers for Disease Control and Prevention (CDC), the age-adjusted rate of overdose deaths involving cocaine are on the rise in the U.S., tripling from 1.6 per 100,000 people in 2013 to 4.9 per 100,000 in 2019 (Hedegaard, Minino & Warner, 2021). In 2019, more than three out of four drug overdose deaths involving cocaine also involved one or more opioid (Hedegaard, Minino & Warner, 2021).

Synthetic cannabinoids, referred to as synthetic marijuana or “fake weed,” are human-made chemicals that are similar to those found in the marijuana plant. Although they are sometimes mistakenly considered safe alternatives to marijuana, they are unsafe and may have more powerful, unpredictable, and possibly life-threatening effects. Synthetic cannabinoids are sometimes sprayed on plant material or sold as liquid that can be vaporized and used in electronic cigarettes or similar devices.

Delaware Overview

According to the National Survey on Drug Use and Health (NSDUH, 2018-2019) estimates, in Delaware, approximately 4% of all people aged 12 and over used an illicit drug, not including marijuana, in the past month. Broken down by age, 2.44% of Delaware youth between ages 12 to 17, 6.67% of adults ages 18 to 25, and 3.79% of adults age 26 and over report using an illicit drug (misuse of prescription psychotherapeutics, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine) in the past month. The 2020 Delaware School Survey (DSS) indicates that 2% of 8th grade students reported use of an illicit drug (other than marijuana) in the past month and 5% within the past year, and one in ten students reported misuse of prescription and over-the-counter medication (including pain medication) within the previous year. Concurrently, less than half (46%) of 8th graders perceive a great risk in misusing prescription medication.

The 2018-2019 NSDUH estimates that approximately 2.21% of Delaware adults age 12 and older have used cocaine in the past year, with adults aged 18 to 25 reporting highest rates of use (6.63%). The Division of Forensic Science 2020 Report indicates that 152 overdose deaths in Delaware involved cocaine (Division of Forensic Science, 2021).[15] Approximately 5% of all drug treatment admissions to publicly funded treatment programs in the state were primarily due to cocaine use (Treatment Episode Data Set [TEDS], 2019).

Five percent of 8th grade students report using synthetic marijuana at least once in their lifetime, 3% report past year use, and 2% report past month use on the 2020 Delaware School Survey.

[15] To explore interactive maps on overdose death rates at the Census tract, zip code, county, and state level, visit the Delaware Opioid Metric Intelligence Project (DOMIP) on the Center for Drug and Health Studies at the University of Delaware website.

National Survey on Drug Use and Health
Selected Drug Use in Delaware, by Age Group
Annual Averages Based on 2018-2019
(in percentages)[a]

Measure	Total 12 or Older	AGE GROUP		
		12-17	18-25	26 or Older
ILLICIT DRUGS				
Past Month Illicit Drug Use[b]	14.32	9.94	29.73	12.62
Past Month Use of Illicit Drugs Other Than Marijuana	4.00	2.44	6.67	3.79
Past Year Cocaine Use	2.21	0.31	6.63	1.79

Figure 81: Selected drug use, Delaware, by age group

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

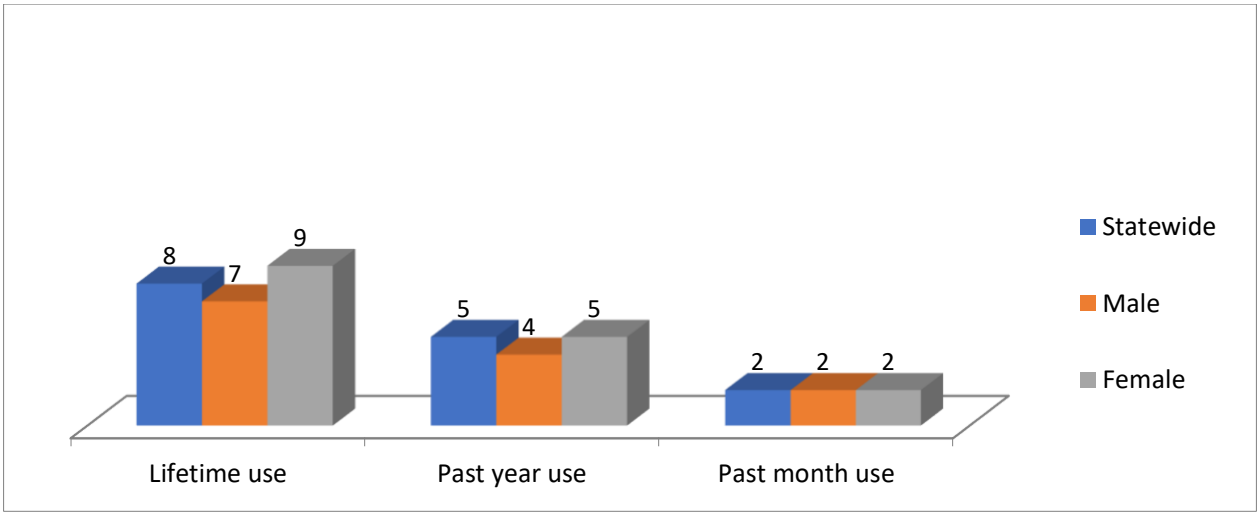
[b] "Illicit Drug Use" includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

2020 Delaware School Survey

Other Illegal Drug[a] Use among Delaware 8th Graders (in percentages)



	Lifetime Use	Past-Year Use	Past-Month Use
Statewide	8	5	2
Male	7	4*	2*
Female	9	5*	2*

Figure 82: Other illegal drug use, 8th graders

Notes:

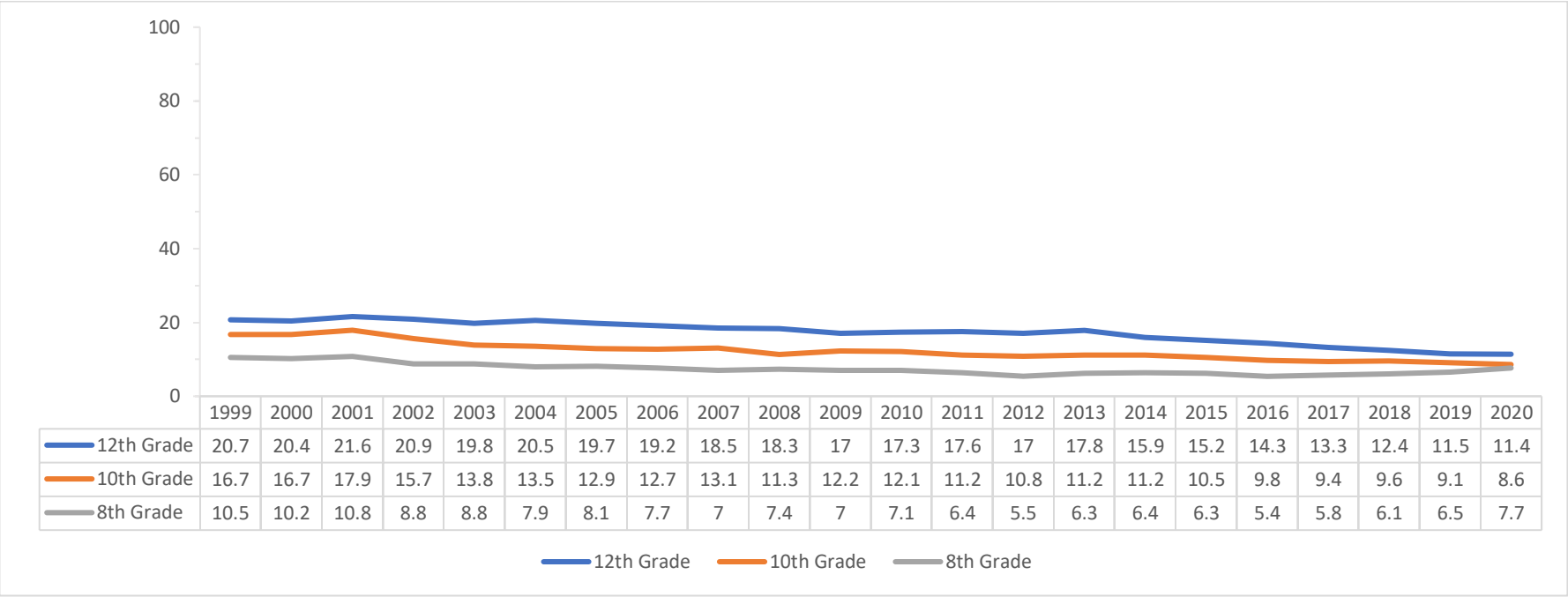
[a] "Other illegal drugs" includes ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.

* Estimates were not statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Monitoring the Future
National Trends in Annual Prevalence: Any Illicit Drug (other than marijuana)
8th, 10th, and 12th Grade
(in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	20.7	20.4	21.6	20.9	19.8	20.5	19.7	19.2	18.5	18.3	17	17.3	17.6	17	17.8	15.9	15.2	14.3	13.3	12.4	11.5	11.4
10th Grade	16.7	16.7	17.9	15.7	13.8	13.5	12.9	12.7	13.1	11.3	12.2	12.1	11.2	10.8	11.2	11.2	10.5	9.8	9.4	9.6	9.1	8.6
8th Grade	10.5	10.2	10.8	8.8	8.8	7.9	8.1	7.7	7	7.4	7	7.1	6.4	5.5	6.3	6.4	6.3	5.4	5.8	6.1	6.5	7.7

Figure 83: National trends in annual prevalence of any illicit drug use (other than marijuana), 8th, 10th, and 12th grade

Note: Any illicit drug is defined by the Monitoring the Future study as LSD, other hallucinogens, crack, cocaine, heroin, or any use of other narcotics, amphetamines, sedatives, or tranquilizers not under a doctor's orders.

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

National Survey of Drug Use and Health

Illicit Drug Use Other than Marijuana in Past Month, by Age Group and State

2017-2018 and 2018-2019

(in percentages)[a]

State	12 or Older			AGE GROUP (Years)								
				12-17			18-25			26 or Older		
	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]	2017-2018	2018-2019	*p* value [b]
Total U.S.	3.30	3.31	.856	2.39	2.37	.843	6.56	6.07	.011	2.88	2.99	.207
Northeast	3.26	3.14	.286	2.17	2.12	.702	7.08	6.26	.011	2.78	2.77	.922
Delaware	3.46	4.00	.098	2.15	2.44	.440	6.19	6.67	.560	3.20	3.79	.125

Figure 84: Illicit drug use other than marijuana, past month, by age group and state

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

[b] *p* value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

"Illicit Drug Use Other Than Marijuana" includes the misuse of prescription psychotherapeutics or the use of cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

National Survey of Drug Use and Health
Illicit Drug Use in Past Month, by Age Group and State
2017-2018 and 2018-2019
(in percentages)[a]

State	12 or Older			AGE GROUP (Years)								
				12-17			18-25			26 or Older		
	2017-2018	2018-2019	*p* value[b]	2017-2018	2018-2019	*p* value[b]	2017-2018	2018-2019	*p* value[b]	2017-2018	2018-2019	*p* value[b]
Total U.S.	11.43	12.34	.000	7.96	8.37	.033	24.04	24.40	.275	9.82	10.90	.000
Northeast	11.88	12.86	.000	8.31	8.56	.502	26.53	26.58	.944	9.96	11.21	.000
Delaware	13.13	14.32	.084	9.90	9.94	.970	28.48	29.73	.455	11.25	12.62	.100

Figure 85: Illicit drug use, past month, by age and state

Notes:

[a] Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

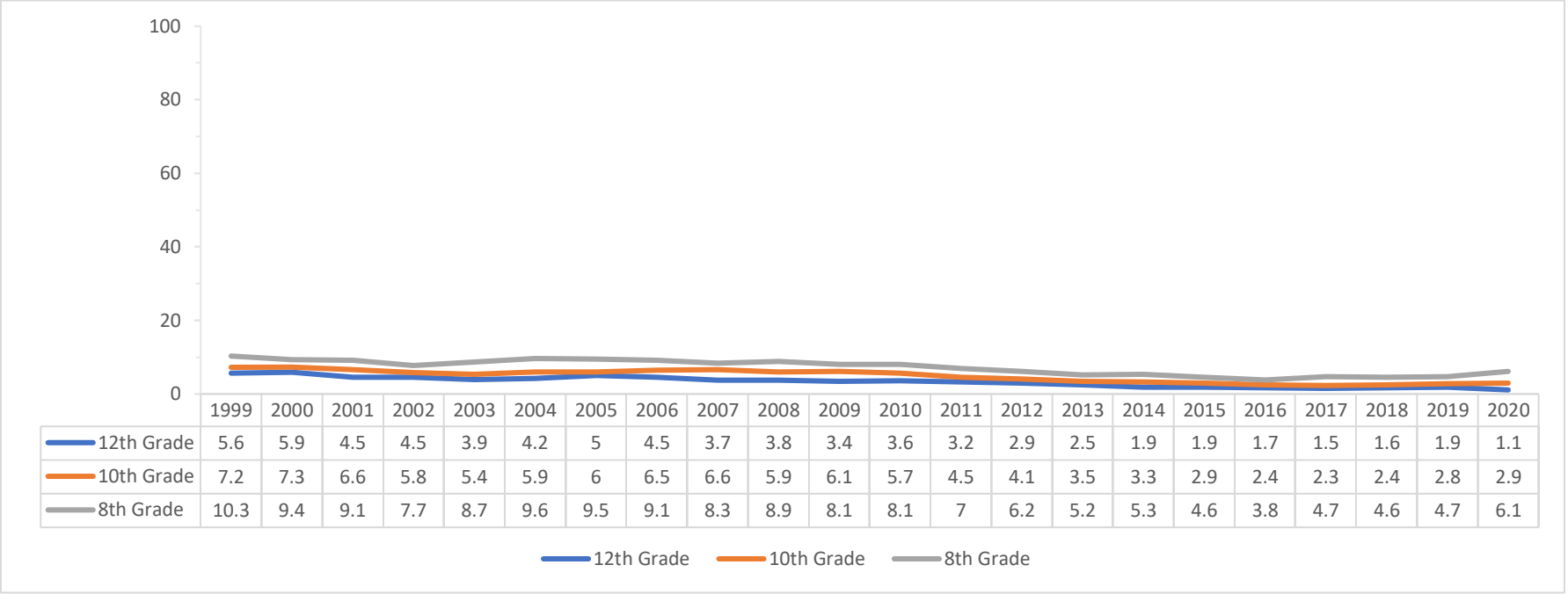
[b] p value: Bayes significance levels for the null hypothesis of no change between the 2017-2018 and 2018-2019 population percentages.

"Illicit Drug Use" includes the misuse of prescription psychotherapeutics or the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Source: "National Survey on Drug Use and Health: Comparison of 2017-2018 and 2018-2019 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures

Monitoring the Future
National Trends in Annual Prevalence: Inhalants
8th, 10th, and 12th Grade
(in percentages)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	5.6	5.9	4.5	4.5	3.9	4.2	5	4.5	3.7	3.8	3.4	3.6	3.2	2.9	2.5	1.9	1.9	1.7	1.5	1.6	1.9	1.1
10th Grade	7.2	7.3	6.6	5.8	5.4	5.9	6	6.5	6.6	5.9	6.1	5.7	4.5	4.1	3.5	3.3	2.9	2.4	2.3	2.4	2.8	2.9
8th Grade	10.3	9.4	9.1	7.7	8.7	9.6	9.5	9.1	8.3	8.9	8.1	8.1	7	6.2	5.2	5.3	4.6	3.8	4.7	4.6	4.7	6.1

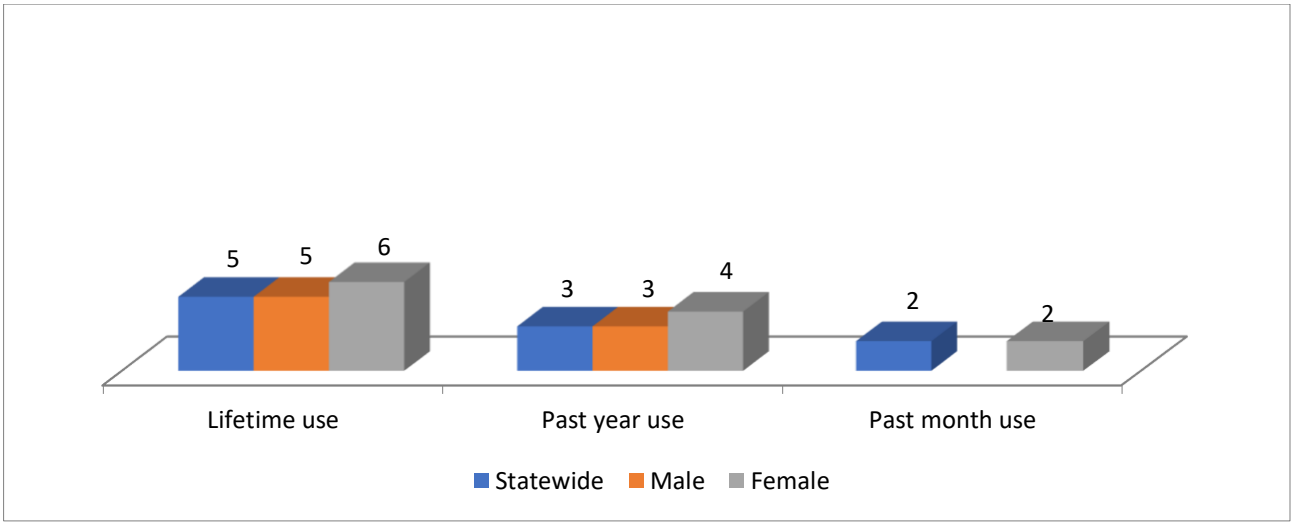
Figure 86: National trends in annual prevalence of inhalant use, 8th, 10th, and 12th grade

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

2020 Delaware School Survey

Synthetic Marijuana Use among Delaware 8th Graders (in percentages)



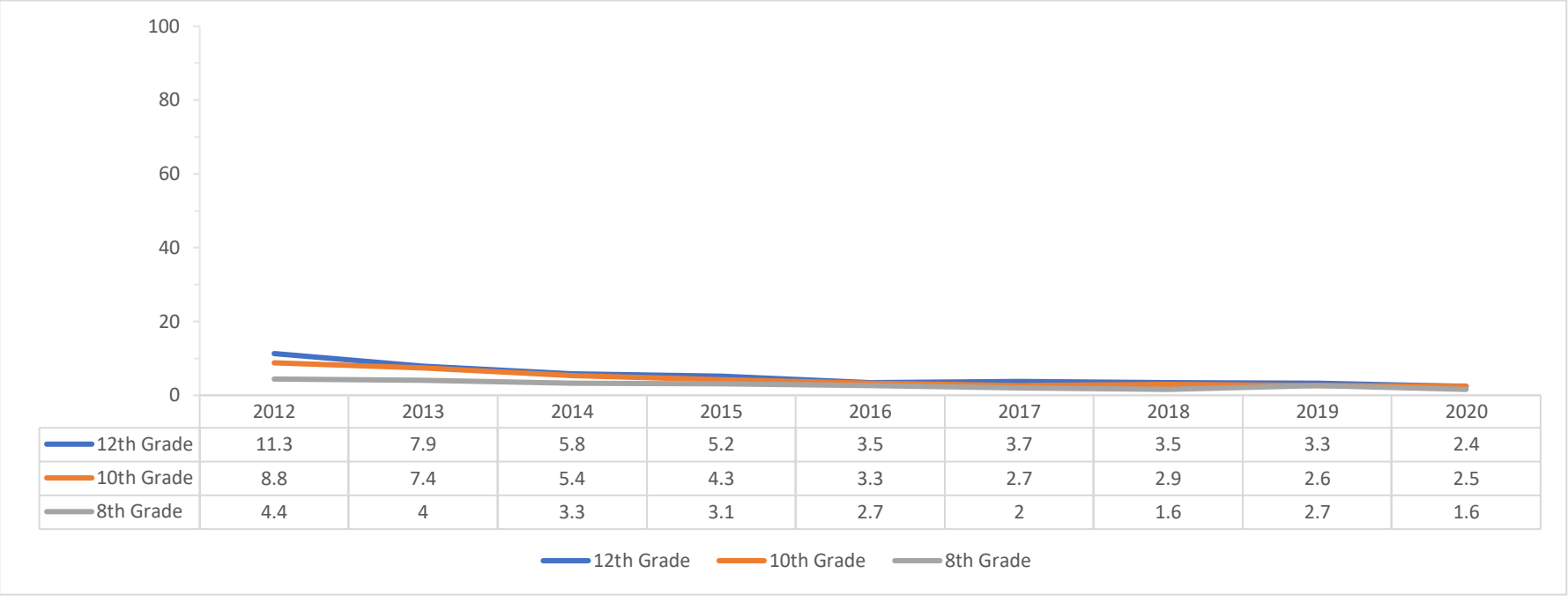
	Lifetime Use	Past Year Use	Past Month Use
Statewide	5	3	2
Male	5*	3*	-
Female	6*	4*	2*

Figure 87: Synthetic marijuana use, 8th grade

Notes:
"-" indicates that the prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
* Estimates were not statistically significant at the p<.05 level.
Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Monitoring the Future
National Trends in Annual Prevalence: Synthetic Marijuana
8th, 10th, and 12th Grade
(in percentages)



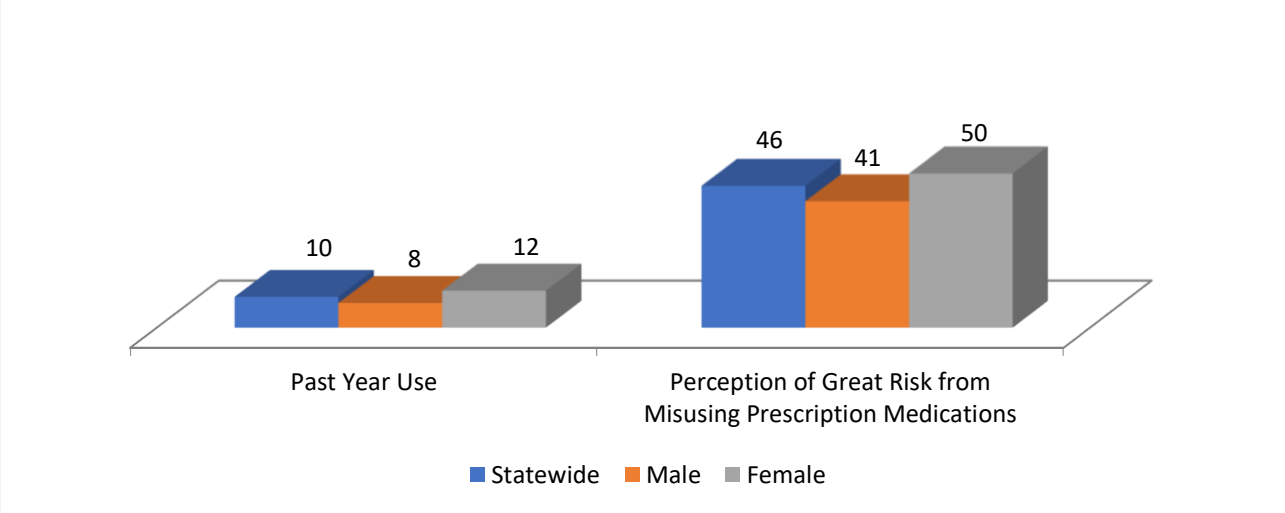
	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	11.3	7.9	5.8	5.2	3.5	3.7	3.5	3.3	2.4
10th Grade	8.8	7.4	5.4	4.3	3.3	2.7	2.9	2.6	2.5
8th Grade	4.4	4	3.3	3.1	2.7	2	1.6	2.7	1.6

Figure 88: National trends in annual prevalence of synthetic marijuana use, 8th, 10th, and 12th grade

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

2020 Delaware School Survey
Medication Misuse[a] among 8th Grade Students
(in percentages)



	Past Year Use	Perception of Great Risk from Prescription Misuse
Statewide	10	46
Male	8	41
Female	12	50

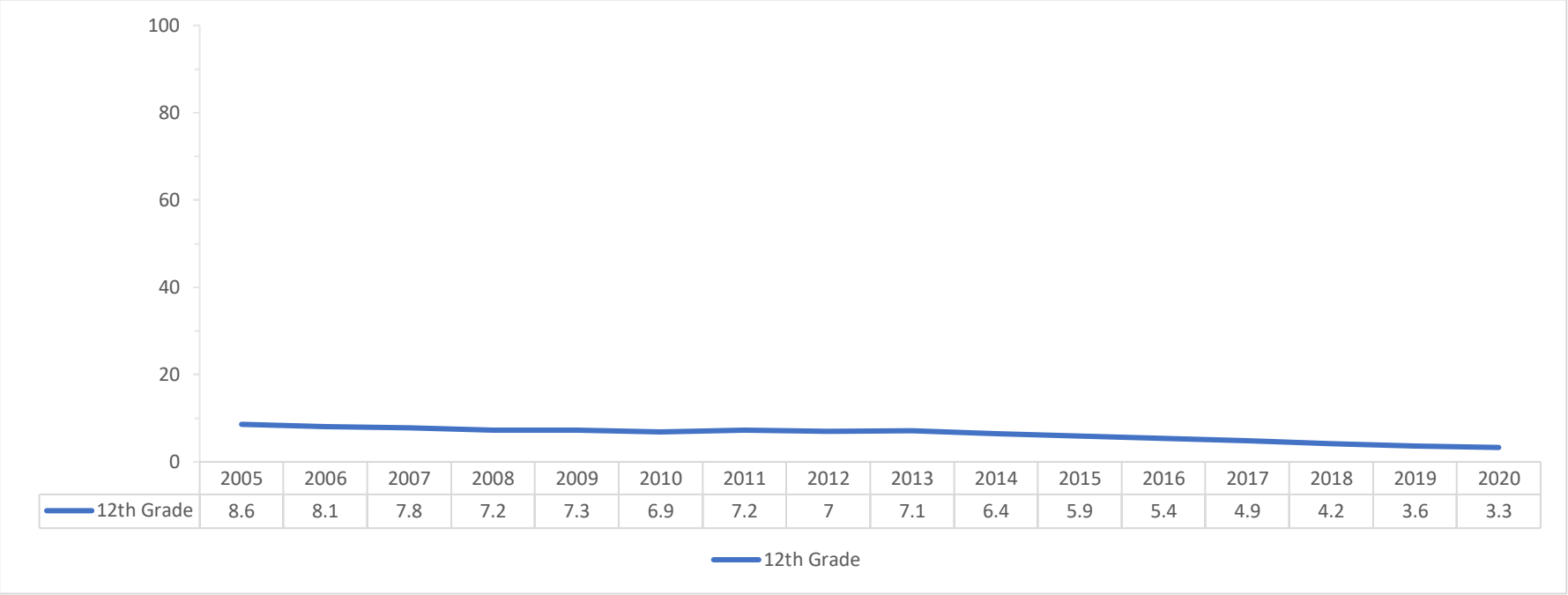
Figure 89: Medication Misuse and Perceptions of Great Risk, 8th grade

Notes:
[a] Medication misuse is defined as the use of any prescription medications such as painkillers, stimulants (ADHD medications and diet pills), steroids, tranquilizers, sleeping pills in a way other than prescribed, as well as the use of any over-the-counter medications, such as cough syrups, to get high.
* Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Monitoring the Future
National Trends in Past Month Prevalence: Prescription Misuse
Among 12th Grade Students
(in percentages)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
12th Grade	8.6	8.1	7.8	7.2	7.3	6.9	7.2	7	7.1	6.4	5.9	5.4	4.9	4.2	3.6	3.3

Figure 90: National trends in past month prevalence of prescription misuse, 12th grade

Source: "National Survey Results on Drug Use, 1975-2020." Monitoring the Future (MTF). University of Michigan.

Back to table of figures

Delaware Treatment Episode Dataset (TEDS), Admissions, 2019

Treatment Admissions by Primary Substance at Admission

Primary Substance at Admission	% of Admissions
Alcohol Only	10.7
Alcohol with Secondary Drug	8.2
Heroin	48.8
Other Opiates	7.1
Cocaine (smoked)	3.2
Cocaine (other route)	1.9
Marijuana	8.1
Amphetamines	0.7
Other Stimulants	0.0
Tranquilizers	0.4
Sedatives	0.1
Hallucinogens	0.3
PCP	0.3
Inhalants	0.0
Other/Unknown	10.2

Figure 91: Delaware treatment admissions by primary substance

Source: "Delaware TEDS admissions aged 12 years and older, by primary substance use and gender, age at admission, race, and ethnicity: Percent, 2019." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Based on administrative data reported by states to TEDS through July 1, 2020.

Back to table of figures

Delaware Treatment Episode Dataset (TEDS), Admissions, 2019

Primary Substance at Admission by Sex

Primary Substance at Admission	% Male	% Female
All Admissions	64.1	35.9
Alcohol Only	73.4	26.6
Alcohol with Secondary Drug	73.2	26.8
Heroin	62.5	37.5
Other Opiates	54.7	45.3
Cocaine (smoked)	58.4	41.6
Cocaine (other route)	65.0	35.0
Marijuana	69.5	30.5
Amphetamines	63.6	36.4
Other Stimulants	100.0	0.0
Tranquilizers	46.6	53.4
Sedatives	33.3	66.7
Hallucinogens	77.1	22.9
PCP	70.4	29.6
Inhalants	80.0	20.0
Other/Unknown	59.1	40.6

Figure 92: Delaware treatment admissions by primary substance and sex

Source: "Delaware TEDS admissions aged 12 years and older, by primary substance use and gender, age at admission, race, and ethnicity: Percent, 2019." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Based on administrative data reported by states to TEDS through July 1, 2020.

Back to table of figures

Delaware Treatment Episode Dataset (TEDS), Admissions, 2019

Primary Substance at Admission by Age Group

(in percentages)

Primary Substance at Admission	12-17	18-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66 and older
All Admissions	0.5	2.4	10.5	20.8	18.1	14.6	8.4	8.1	7.6	5.3	2.3	1.3
Alcohol Only	0.0	0.3	4.5	7.4	11.1	11.3	9.7	13.8	17.1	13.7	6.5	4.7
Alcohol with Secondary Drug	0.1	1.6	7.6	12.8	13.2	14.5	11.4	14.3	13.5	7.0	3.2	0.8
Heroin	0.0	1.1	9.9	25.8	21.9	15.9	8.4	6.8	5.1	3.3	1.2	0.5
Other Opiates	0.0	1.0	100.1	22.1	23.5	15.8	6.9	5.3	6.6	4.8	1.9	1.9
Cocaine (smoked)	0.0	0.4	5.6	14.1	14.7	12.7	8.4	12.7	14.5	11.4	5.0	0.4
Cocaine (other route)	0.0	0.7	8.6	15.8	12.2	21.8	11.2	9.6	10.9	5.3	3.3	0.7
Marijuana	4.3	12.2	22.9	22.0	12.4	11.3	4.3	3.4	3.2	2.2	1.2	0.4
Amphetamines	0.0	3.4	7.6	14.4	23.7	13.6	8.5	15.3	5.9	5.9	1.7	0.0
Other Stimulants	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Tranquilizers	0.0	5.2	12.1	31.0	12.1	13.8	6.9	8.6	3.4	5.2	1.7	0.0
Sedatives	0.0	0.0	22.2	33.3	0.0	22.2	22.2	0.0	0.0	0.0	0.0	0.0
Hallucinogens	0.0	0.0	12.5	31.3	16.7	20.8	6.3	8.3	2.1	2.1	0.0	0.0
PCP	0.0	0.0	1.9	18.5	37.0	27.8	5.6	5.6	1.9	0.0	1.9	0.0
Inhalants	0.0	0.0	0.0	0.0	20.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0
Other/Unknown	1.4	5.3	14.4	18.6	13.8	11.9	8.8	7.2	6.8	6.1	3.1	2.7

Figure 93: Delaware treatment admissions by primary substance and age group

Source: Delaware TEDS admissions aged 12 years and older, by primary substance use and gender, age at admission, race, and ethnicity: Percent, 2019. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Based on administrative data reported by states to TEDS through July 1, 2020.

Back to table of figures

Delaware Treatment Episode Dataset (TEDS), Admissions, 2019

Primary Substance at Admission by Race and Ethnicity

(in percentages)

Primary Substance at Admission	White	Black or African-American	American Indian or Alaskan Native	Asian or Native Hawaiian or Other Pacific Islander	Unknown		Hispanic or Latino	Not Hispanic or Latino
All Admissions	67.2	26.6	0.6	2.0	3.6		6.0	92.2
Alcohol Only	72.4	21.8	0.8	2.2	2.8		6.9	92.7
Alcohol with Secondary Drug	61.8	31.1	0.9	1.6	4.5		4.0	94.4
Heroin	78.0	17.7	0.3	1.7	2.3		5.9	93.6
Other Opiates	65.8	29.3	0.4	2.0	2.5		5.6	93.5
Cocaine (smoked)	45.8	50.6	0.4	0.6	2.6		4.6	93.0
Cocaine (other route)	53.8	38.9	0.3	2.0	5.0		5.6	90.1
Marijuana	36.8	52.1	1.5	3.7	5.9		8.2	89.4
Amphetamines	86.4	10.2	0.8	0.0	2.5		0.0	98.3
Other Stimulants	100.0	0.0	0.0	0.0	0.0		0.0	100.0
Tranquilizers	62.1	27.6	0.0	5.9	3.4		6.9	89.7
Sedatives	77.8	11.1	0.0	0.0	11.1		0.0	100.0
Hallucinogens	62.5	31.3	2.1	2.1	2.1		6.3	93.8
PCP	3.7	85.2	3.7	5.6	1.9		9.3	90.7
Inhalants	100.0	0.0	0.0	0.0	0.0		0.0	100.0
Other/Unknown	49.5	38.1	1.0	2.9	8.5		6.7	84.6

Figure 94: Delaware treatment admissions by primary substance and race and ethnicity

Source: Delaware TEDS admissions aged 12 years and older, by primary substance use and gender, age at admission, race, and ethnicity: Percent, 2019. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Based on administrative data reported by states to TEDS through July 1, 2020.

Back to table of figures

Drug Overdose Deaths in Delaware
by County and Select Demographic Characteristics

2020 Drug Overdose Deaths by County (count)	
Kent	123
New Castle	50
Sussex	274
Total	447

	2016 N=308	2017 N=345	2018 N=400	2019 N=431	2020 N=447
SEX:					
MALE	69%	69%	71%	72%	68%
FEMALE	31%	31%	29%	28%	32%
RACE:					
WHITE	87%	75%	81%	77%	77%
BLACK	13%	19%	15%	17%	19%
HISPANIC	-	5%	4%	6%	4%
OTHER	-	1%	-	-	-
AGE:					
40 OR YOUNGER	42%	50%	51%	54%	46%
41-50	n/a	23%	22%	22%	23%
51 AND OLDER	n/a	27%	27%	24%	31%

Figure 95: Drug overdose deaths in Del. by demographic

Notes:

Source: Office of the Chief Medical Examiner, Division of Forensic Medicine, Department of Safety and Homeland Security, State of Delaware
Includes overdose deaths for opioids and other drugs.

Back to table of figures

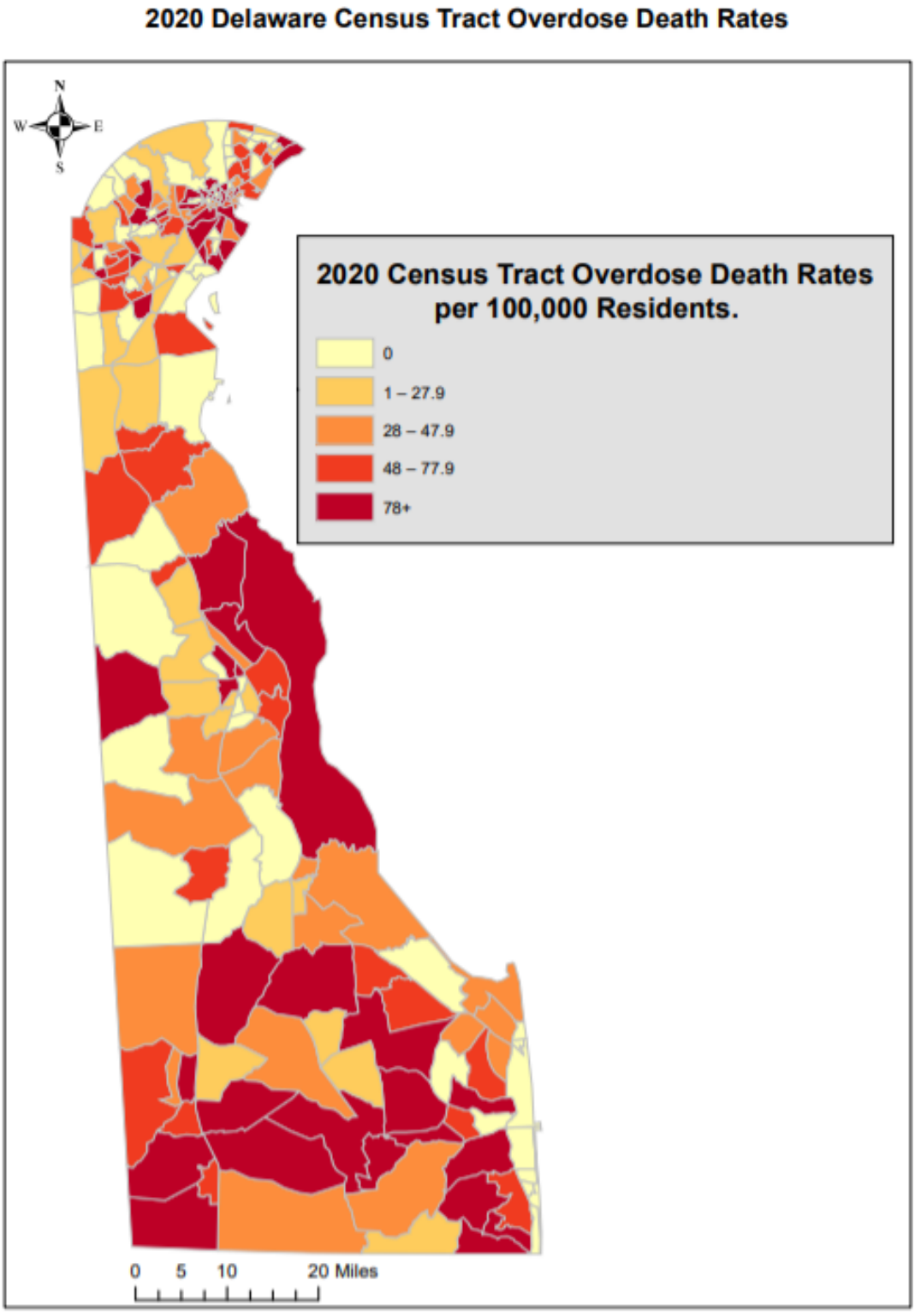


Figure 96: Map of drug overdose deaths in Delaware by census tracts

Source: Delaware Opioid Metric Intelligence Project (DOMIP)

Back to table of figures

7. **Infants with Prenatal Substance Exposure**

National Overview

In 2020, 702 cases of infants with prenatal substance exposure were reported in Delaware. Plans of safe care (POSC) were established for 653 cases.

Marijuana was the most commonly identified substance among infants with exposure to one or two substances, and opioids were most commonly identified in cases of polysubstance exposure. Fentanyl exposure has increased over time and was present in 92 cases.

Infants with prenatal substance exposure (IPSE) to opioids and other drugs are at increased risk for a host of challenges to healthy development. In addition to physical health risks related to direct substance exposure, continued substance use by the parent or caregiver may likely contribute to an unstable home life for the infant. Substance use is often identified among child abuse and neglect cases within child welfare systems (Child Welfare Information Gateway, 2014). Such traumas, in turn, are associated with increases in risk behaviors and negative health outcomes throughout the child's lifespan. According to the CDC, the rate of women with opioid-related diagnoses at the time of delivery is on the rise; 2017 data from the Healthcare Cost and Utilization Project indicates that seven out of every 1,000 babies born are diagnosed with neonatal abstinence syndrome, a group of conditions that can develop when newborns experience withdrawal from specific substances (CDC, n.d.).

Delaware Overview

In Delaware, the Office of the Child Advocate tracks notifications of infants with prenatal substance exposure (IPSE) and examines associated characteristics. In October 2016, Delaware received a Substance-Exposed Infants In-Depth Technical Assistance (SEI-IDTA) grant from the National Center on Substance Abuse and Child Welfare. Governor Carney's "Action Plan for Delaware," published in January 2017, included the reduction in number of children born exposed to substances as one of his administration's primary policy objectives (Transition Team Report, 2017). In Spring 2018, the Delaware General Assembly passed "Aiden's Law," which requires healthcare professionals to notify the Delaware Division of Family Services (DFS) of substance-exposed births and to provide for a collaborative, coordinated, and multidisciplinary plan of safe care (POSC) for the infant and their affected family or caregivers. As of August 2018, Delaware became the first state with universal implementation of POSCs at all birthing hospitals (Delaware Office of the Child Advocate, 2021).

IPSE notifications increased from 2015 through 2019. In 2020, 702 notifications were made, three fewer than reported in 2019 (Delaware Office of the Child Advocate, 2021). Two out of three cases involved a single substance exposure, with marijuana the most commonly identified substance. Among the 129 births involving exposure to two substances, marijuana was most prevalent followed by methadone and opioids. In cases of polysubstance exposure (three or more substances present at birth) opioids followed by methadone, fentanyl, and cocaine were most commonly identified. Fentanyl exposure has increased over time and was identified in 92 cases of IPSE births.

Among the more dramatic findings, 40% of the mothers who gave birth to prenatally substance exposed infants report that they themselves have a history of involvement with family services as a youth or a history of childhood trauma. More than half (56%) report a mental health condition, although the rate was slightly lower (47%) among infants born with exposure to marijuana only (Delaware Office of the Child Advocate, 2021).

Early, coordinated intervention and family support are critical to ameliorating negative impacts of prenatal substance use. In 2020, POSCs were established for 653 cases with the father identified as a plan participant in 371 of them. Pediatric referrals were made in 346 of these cases, and child safety agreements were made in 189. DFS provided 288 referrals for services for mothers and 57 referrals for fathers. With these supports, in 88% of 2020 IPSE notifications, the infant remained in the home with the mother at the time of discharge. The following figures highlight key findings from the 2020 program review by the Office of the Child Advocate.

Five Year Comparison of SEI Notifications to DFS, 2015-2020

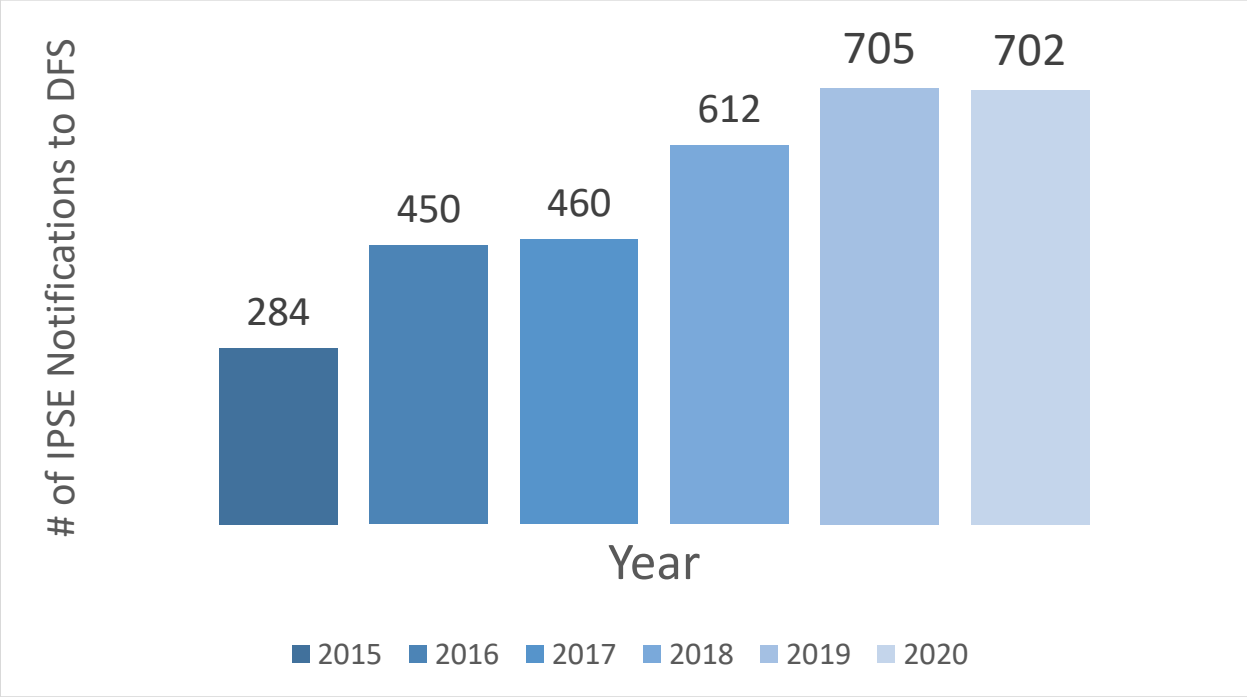


Figure 97: Comparison of IPSE birth notifications to DFS

Note: The figure depicts the annual count of IPSE notifications made to the Division of Family Services from 2015 to 2020.

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

Back to table of figures

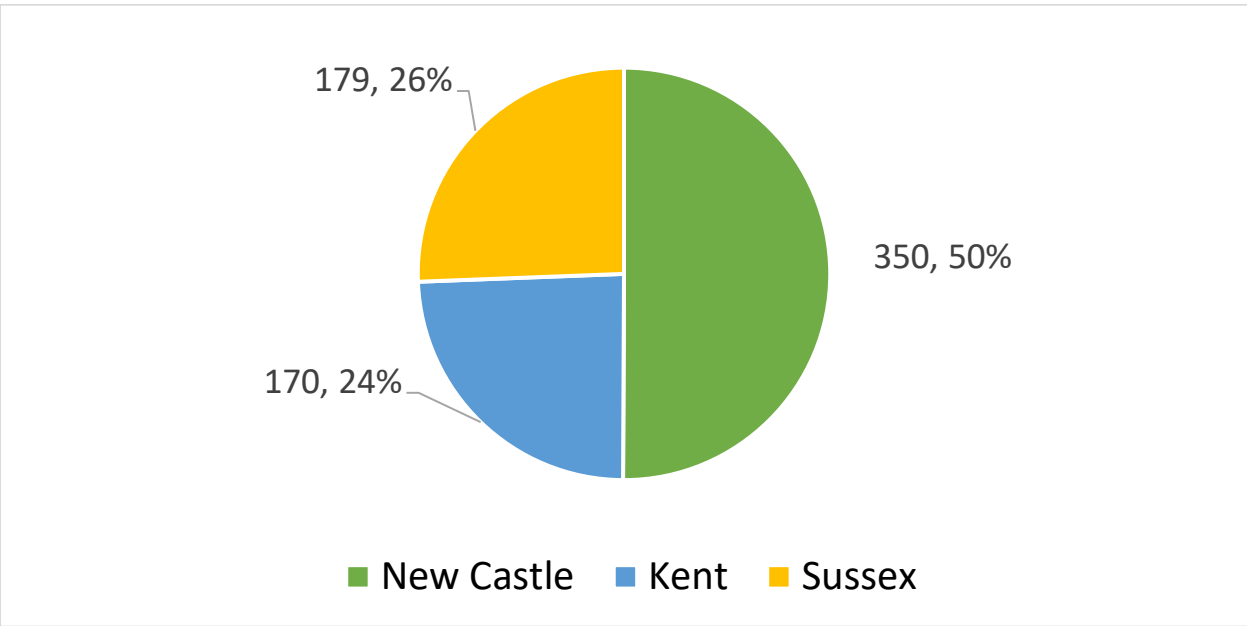


Figure 98: IPSE birth notifications by county, 2020

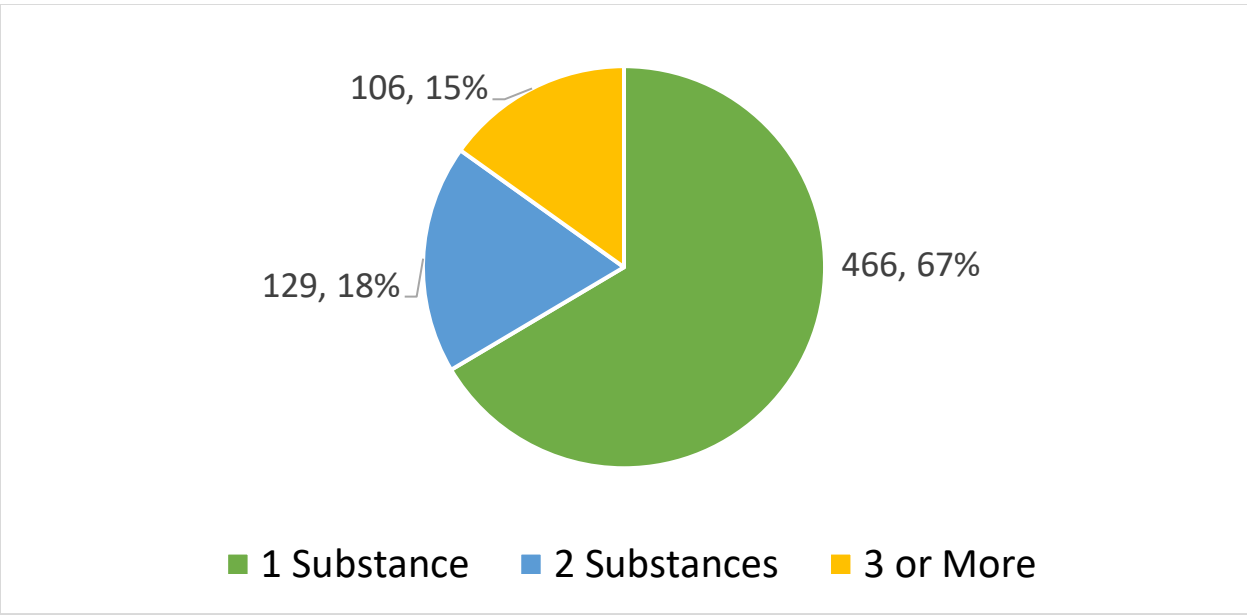


Figure 99: IPSE birth notifications by 1, 2, or more substances

Note: The figures include both the count and percentage of a given category.
Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

Back to table of figures

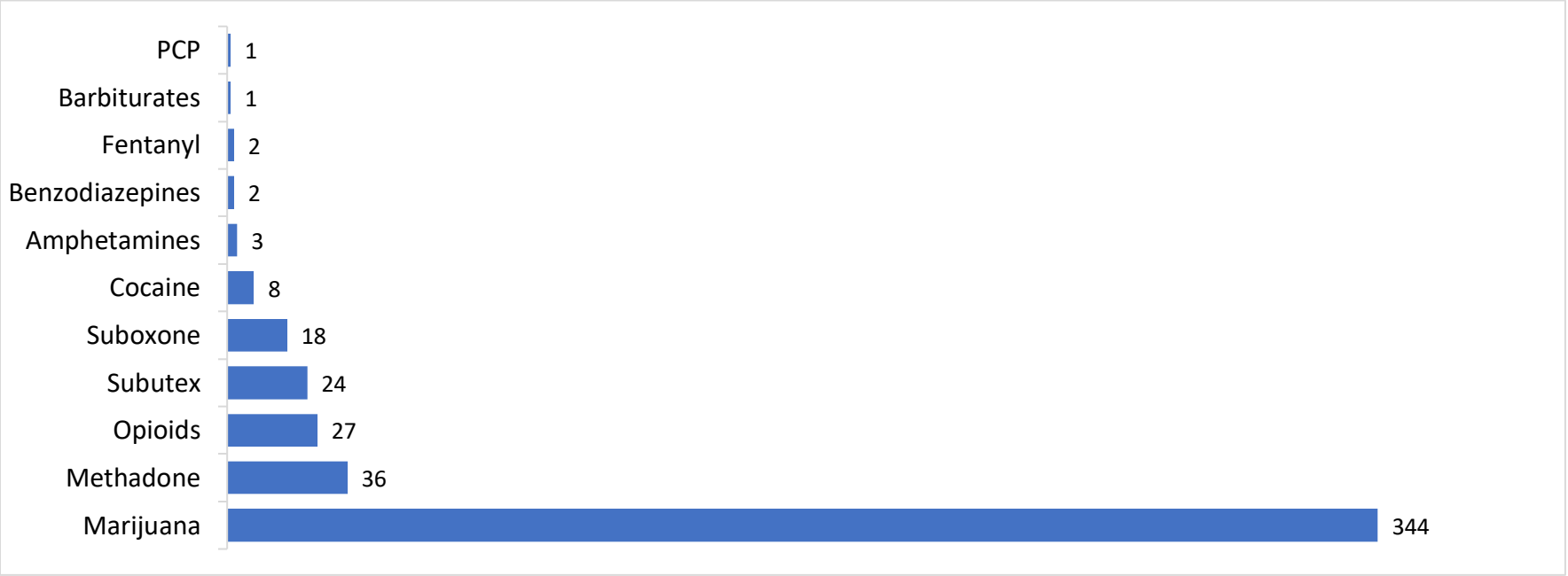


Figure 100: Prevalence of substances in single substance exposure among IPSE notifications

Note: The figure includes the count of cases for each identified substance among single substance exposures.

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

Back to table of figures

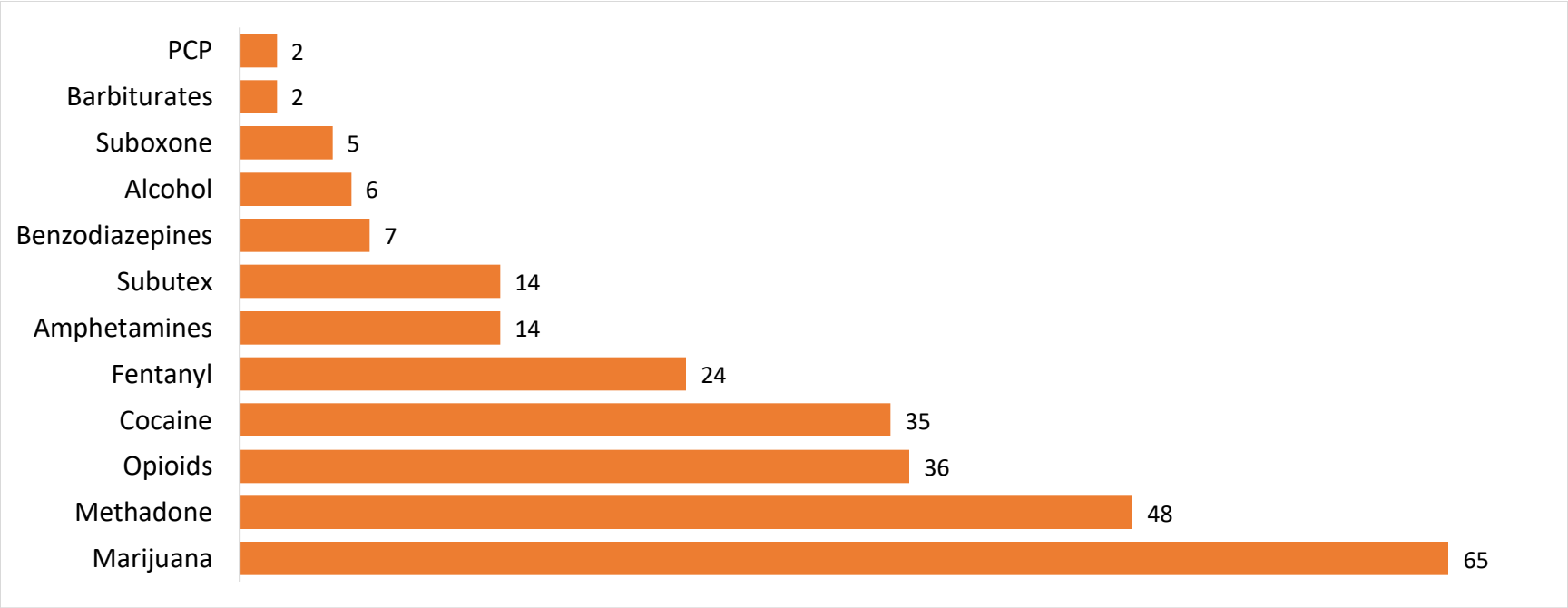


Figure 101: Prevalence of substances in 2 substance exposure among IPSE notifications

Note: The figure includes the count of cases for each identified substance among two substance exposures.

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

Back to table of figures

2020 IPSE Notifications
Prevalence of Substances in Poly (3 or More) Substance Exposure (n=89)

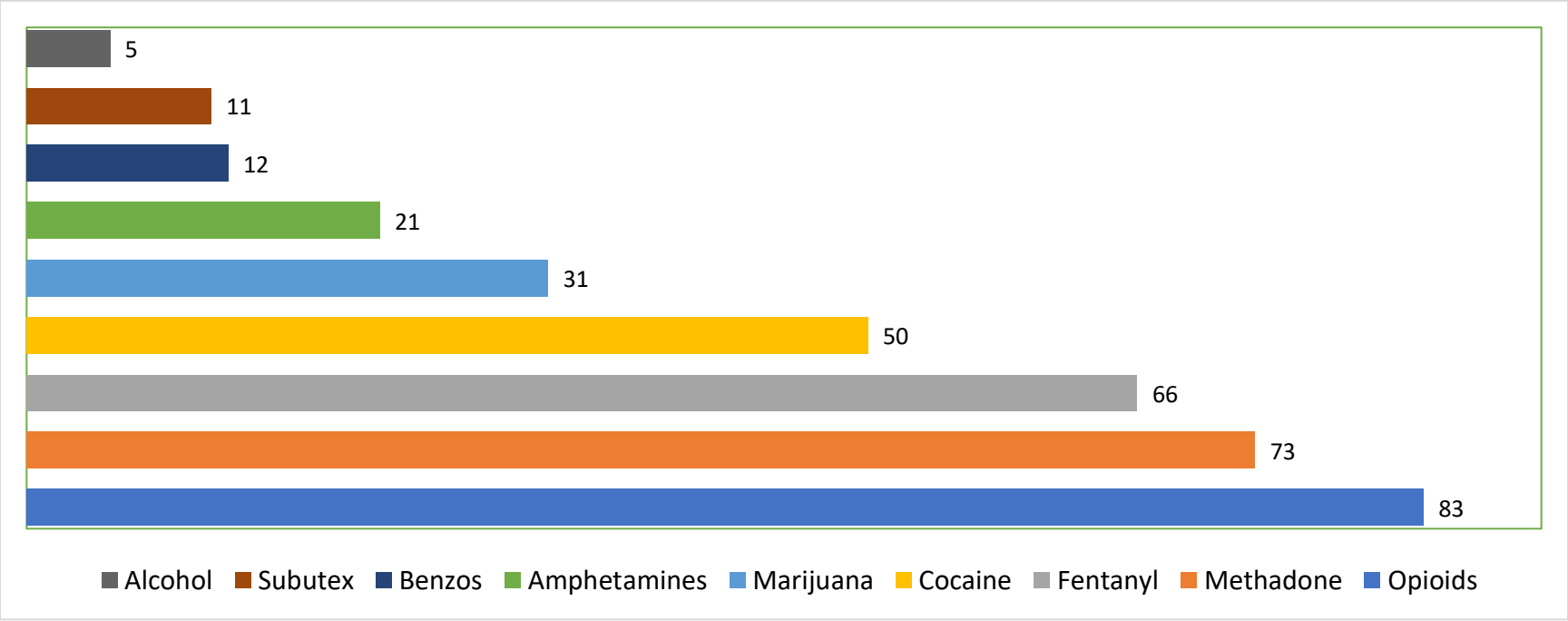


Figure 102: Prevalence of substances in 3 or more substance exposure among IPSE notifications

Note:
The figure includes the count of cases for each identified substance among poly (3 or more) substance exposures.

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

Back to table of figures

2020 IPSE Notifications
Maternal Risk Factors, 2017-2020

Risk Factor	2017	2018	2019	2020
DFS History/Trauma as Child	40%	43%	40%	40%
Mental Health Condition	34%	46%	56%	56%
Prior IPSE Birth	28%	25%	25%	24%
Prior DFS Substantiation	-	9%	10%	-
Unknown/Unnamed Father/Partner	-	16%	11%	16%
Engaged in SUD/MAT/MH Treatment (at time of Birth)	-	-	-	38%

Figure 103: Table of maternal risk factors among cases involving IPSE births

Note: "-" No data was reported for a specific factor during that year.

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

Back to table of figures

2020 IPSE Notifications

Engaged in Treatments Services at Time of Birth Event

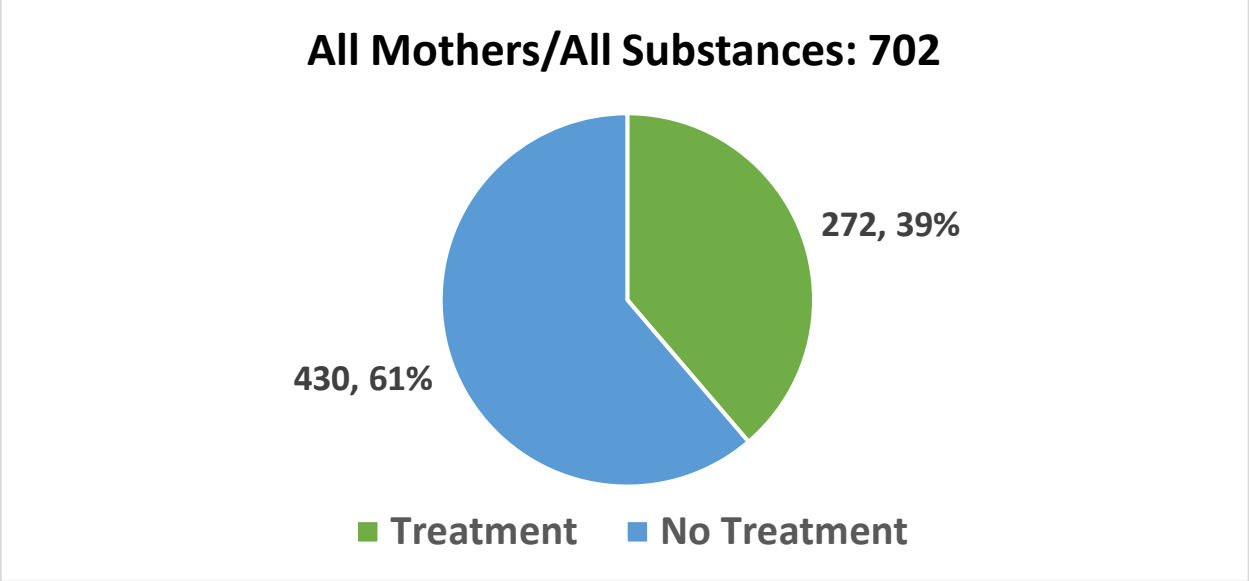


Figure 104: Mothers engaged in treatment at time of birth

Note: Treatment includes MAT, mental health, substance use, or pain management treatment.

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

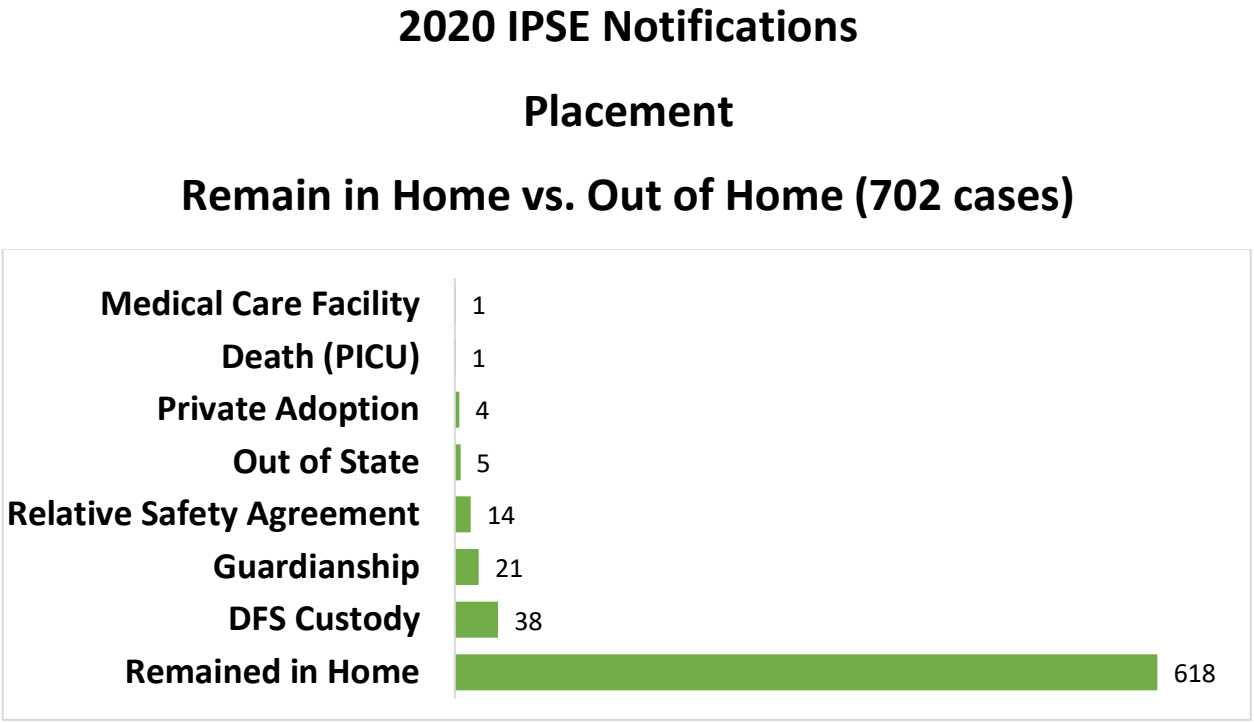


Figure 105: Placement following IPSE notifications after birth

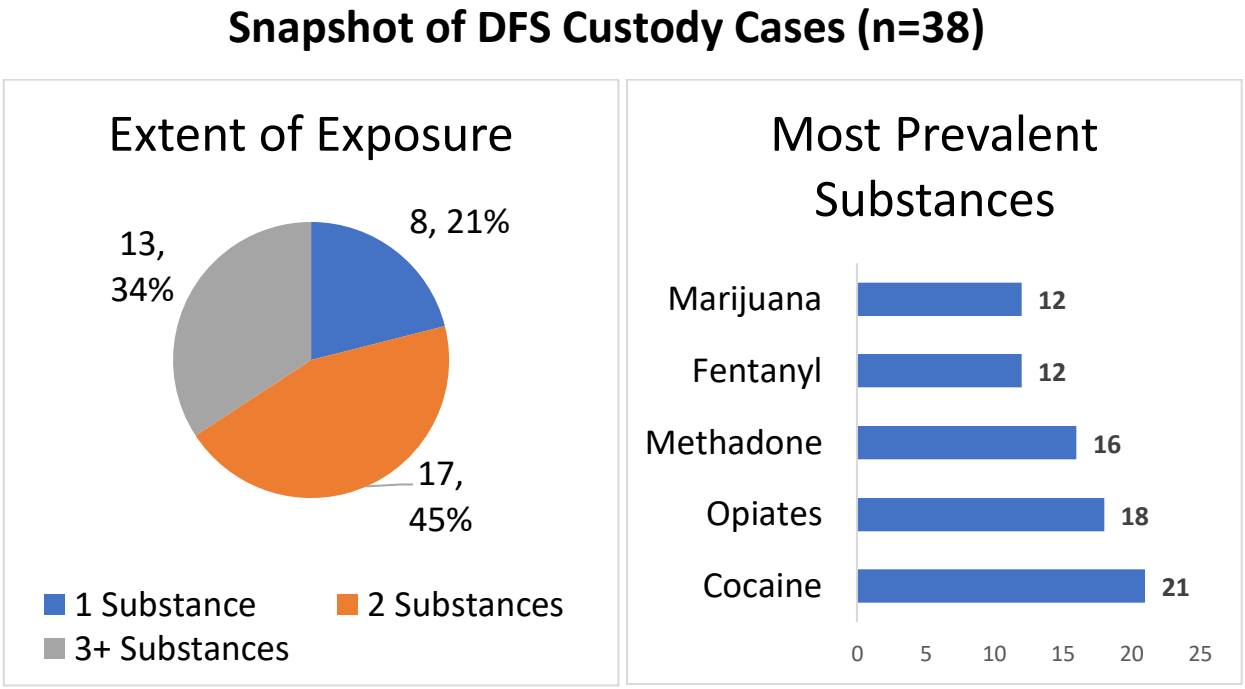


Figure 106: Snapshot of DFS custody cases

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

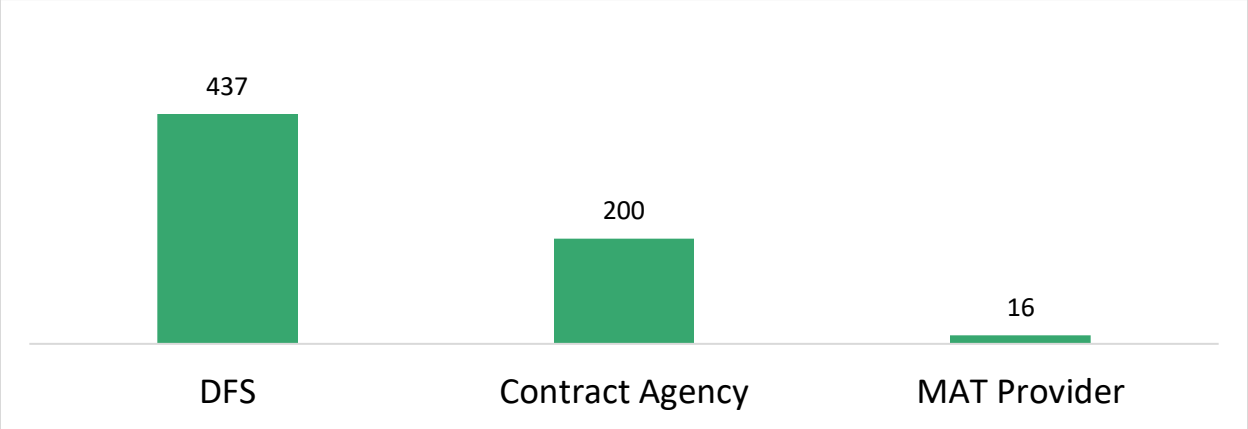


Figure 107: Plans of Care prepared

DFS Referrals for Services		
Plans of Safe Care Prepared (POSC) by DFS:	**437**	
Father identified as POSC participant:	**371**	
Child Safety Agreement with POSC:	**189**	
	For Mother	**For Father/Other Caregiver**
Referrals made	288	57
No referrals made	149	314

Figure 108: DFS Referrals for mothers, fathers, and child safety agreements

Source: Delaware Infants with Prenatal Substance Exposure 2020 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

8. **Gambling**

National Overview

Gambling and problem gambling has been associated with heightened substance use and mental health disorders.

Approximately half (51%) of Delaware 8th graders report that they gambled at least once in the past year. Students who gambled were more likely to also report substance use.

Gambling is defined as risking money, or something else of value, on the outcome of an event that is at least partially determined by chance (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). While gambling can provide entertainment and function as a pleasurable pastime for many individuals, problem gambling and gambling disorders can present numerous challenges and negative consequences for others. A gambling disorder requires at least four of the following nine criteria: preoccupation with gambling; inability to cut back or control gambling; irritability or restlessness when attempting to cut back or control gambling; risking more money to achieve the desired level of excitement; gambling to cope with emotional problems; "chasing one's losses" by gambling even more after losing; lying about gambling; jeopardizing relationships or employment due to gambling; and relying on others to solve financial issues caused by gambling (American Psychiatric Association, 2013).

Gambling disorders also correlate with other demographic and behavioral health factors, suggesting that certain populations are more at risk for developing gambling problems. According to a meta-analysis of gambling studies in the U.S. and Canada, researchers from Harvard reported that disordered gambling was most prevalent among young people rather than the general adult population, males rather than females, and among those with concurrent psychiatric disorders (Shaffer, Hall, & Built, 1997). An analysis of data from the National Epidemiologic Survey on Alcohol and Related Conditions found that among individuals who met the criteria for gambling disorder, roughly three-quarters had a co-occurring alcohol use disorder, nearly 40% had another substance use disorder, and the majority also had nicotine dependence. In this same sample, the majority with symptoms of gambling disorders also had a mood disorder, anxiety disorder, and/or a personality disorder (Petry, Stinson, & Grant, 2005).

Gambling and problem gambling have been associated with heightened substance use and mental health disorders among younger populations as well. Studies focusing on the co-occurrence of substance use disorders, mental health disorders, and disordered or problem gambling in college student populations found that among the roughly 5% of students who met the criteria for problem gambling, there were much higher rates of problem drinking, anxiety, and depression compared to the general population of college students (Martin, Usdan, Cremeens, & Vail-Smith, 2014; Martens, Rocha, Cimini, Diaz-Myers, Rivero, & Wulfert, 2009).

Delaware Overview

In the U.S., gambling regulations vary from state to state; in Delaware, most forms of gambling are allowed and there are multiple casinos. However, there are different age restrictions for certain gambling behaviors. Delaware residents must be 18 or older to play charity bingo, purchase lottery tickets or scratch-offs, or make a bet on horses. Individuals must be 21 or older to gamble in casinos or slot machines or on the internet (Delaware Council on Gambling Problems, 2018). In June 2018, Delaware became the second state to legalize all other sports gambling, following the May Supreme Court decision, *Murphy v. National Collegiate Athletic Association* (Domonoske, 2018). Previously, the only other state to allow sports gambling was Nevada, which had legalized the practice in the early 1990s.

The Delaware School Survey considers gambling to include: betting on a dice game; betting on individual sports teams; playing Bingo for money; playing the lottery or scratch-off tickets; gambling on the internet; betting on fantasy sports; betting on a game of personal skill such as pool, darts, or basketball; betting on a video game; playing cards for money; or betting on a challenge (dare, fight, street race, etc.). Among 8th graders surveyed in Delaware, approximately half (51%) reported that they gambled at least once in the past year. Male students reported higher rates of gambling than female students. Students who reported past year gambling were three times as likely to report past year rates of alcohol and marijuana use and lifetime misuse of prescription pain medicine.

2020 Delaware School Survey

Delaware 8th Graders Who Report Gambling in the Past Year (in percentages)

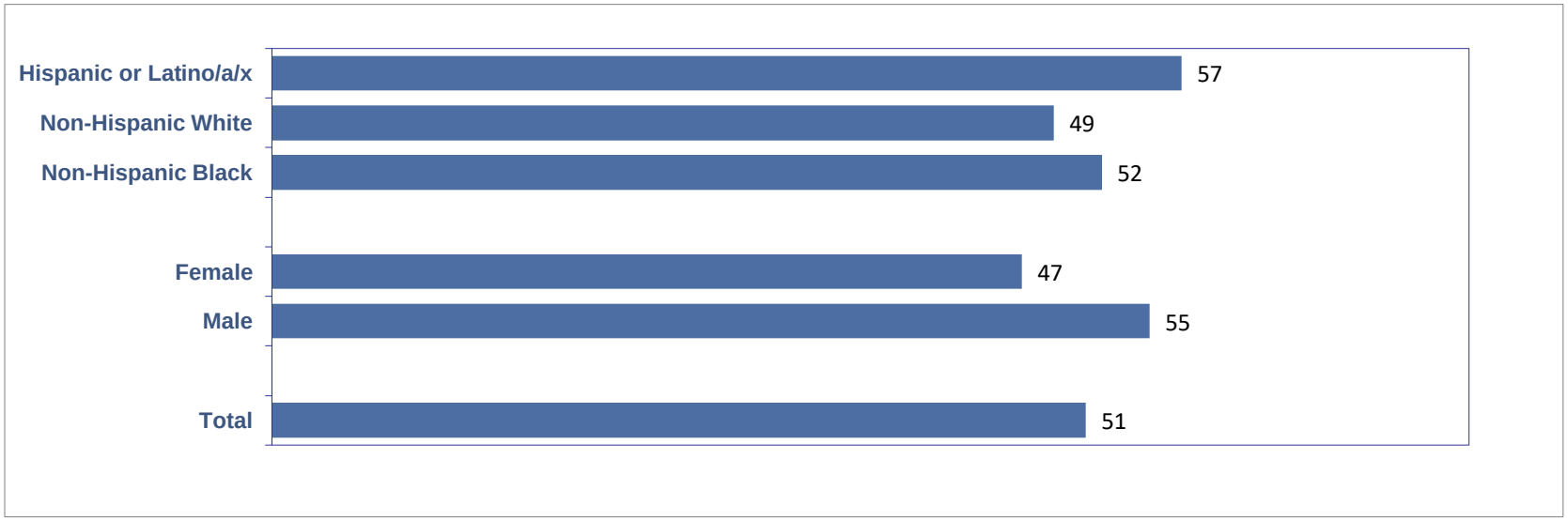


Figure 109: Past year gambling, by sex and race/ethnicity, 8th graders

Notes:
* Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
** Gambling refers to at least one of the following: played the lottery or scratch-off tickets; bet on fantasy sports; bet on individual sports teams; played Bingo for money; bet on dice games such as craps; bet money on a challenge (dare, fight, street race, etc.); played online gambling games for money; bet on video games; bet on games of personal skill such as pool, darts, or basketball; played cards for money.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey
Past Year Gambling and Substance Use among Delaware 8th Graders (in percentages)

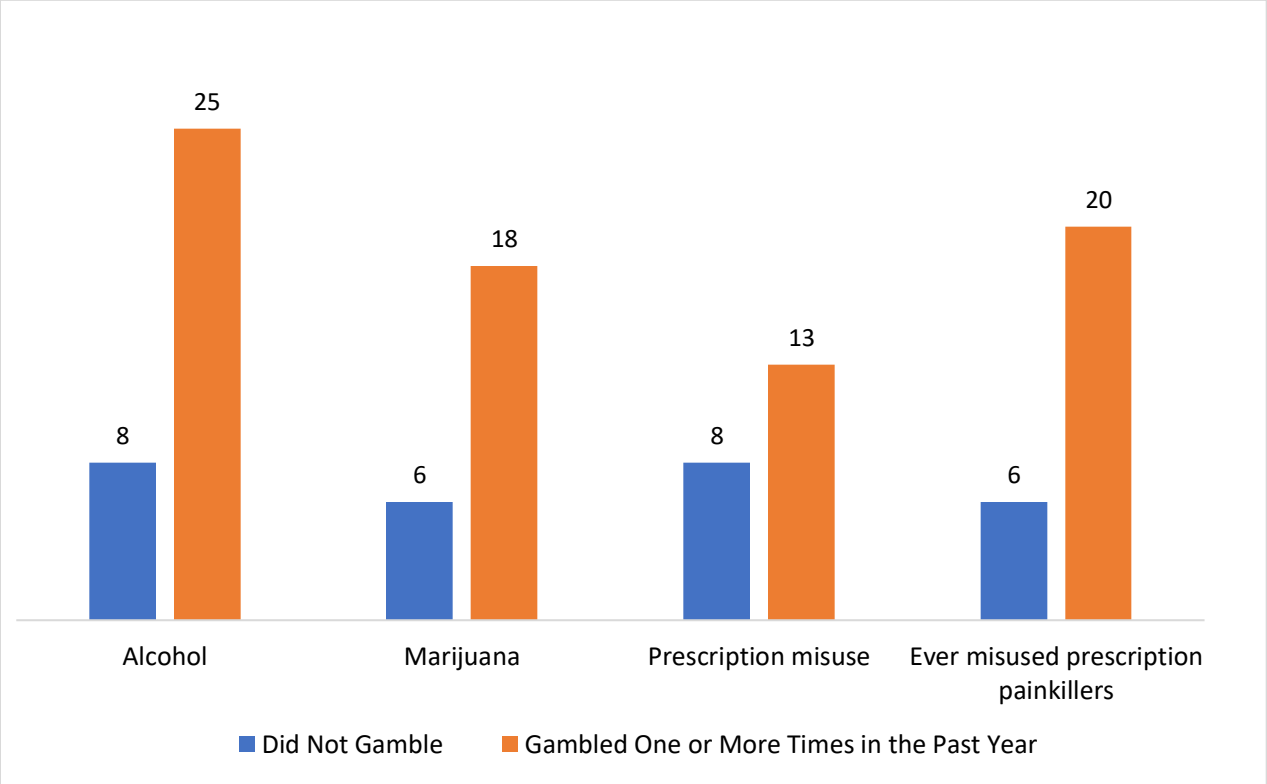


Figure 110: Gambling and substance use, 8th graders

Notes:
* Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
** Gambling refers to at least one of the following: played the lottery or scratch-off tickets; bet on fantasy sports; bet on individual sports teams; played Bingo for money; bet on dice games such as craps; bet money on a challenge (dare, fight, street race, etc.); played online gambling games for money; bet on video games; bet on games of personal skill such as pool, darts, or basketball; played cards for money.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

9. **Mental Health and Wellness**

National Overview

> Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood to adolescence through adulthood. (Centers for Disease Control and Prevention, n.d.)

Mental health is an important component of overall health. Substance use disorders and mental health conditions often co-occur.

Early research suggests that many Americans, including children, have experienced higher levels of distress since the start of the COVID-19 pandemic.

It is estimated that approximately 1 in 5 Delawareans has experienced any type of mental illness in the past year, and 1 in 20 has experienced a serious mental illness.

Although 1 in 5 Delaware 8th graders report recent symptoms of anxiety and 16% report recent symptoms of depression, the majority of students demonstrated hopefulness as they considered their future wellbeing.

According to the Centers for Disease Control and Prevention (CDC), mental illnesses are among the most common health problems experienced throughout the country: more than half of the people in the U.S. will be diagnosed with a mental illness or disorder during their lifetime; one in five Americans will experience a mental illness each year; one in five children will experience a "serious debilitating mental illness" at some point in their lifetime; and approximately 4% of adults live with a serious mental illness, such as schizophrenia or major depression (CDC, n.d.). Mental health problems may arise from multiple causes ranging from biological or genetic factors to life circumstances and stressors such as trauma, or they may result from a combination of these contributing dynamics. Though often challenging, mental illnesses are treatable, but recognizing the need for treatment and accessing services can be difficult.

Mental health is a major component of one's overall health and well-being, and poor mental health is associated with higher risk for physical conditions, such as cardiovascular disease, diabetes, and Alzheimer's dementia (National Institute of Mental Health, n.d.). Substance use disorders and mental health problems often co-occur. Findings from a National Institute on Drug Abuse (NIDA, 2020) research report indicates approximately half of individuals who experience a mental disorder will also experience a substance use disorder at some point in

their lifetime. The co-occurrence of substance use and mental health disorders may be due to common risk factors for both conditions, or one condition may lead to the other.

Several national behavioral health data sources indicate that many Americans have experienced higher levels of distress since the start of the pandemic, a period also marked by social and political unrest and economic uncertainty. For example, the American Psychological Association (APA) Stress in America poll revealed that a majority of adults have experienced unintended weight changes and changes in sleeping habits since March 2020. Nearly half have delayed or canceled health care services and nearly half of all parents reported that their stress levels had increased. The impacts appear disproportionate with certain groups experiencing greater degrees of distress, notably essential workers, Black Americans, and "Gen Z" adults, aged 18 to 23 (APA, 2021). The Rapid Assessment of Pandemic Impact on Development – Early Childhood (RAPID-EC) is an ongoing national study involving households with children aged five and under. RAPID-EC data indicates parental stress, loneliness, anxiety, and depression rose sharply in April 2020 and remained at that level before starting to decline in March 2021; however, these trends have increased slightly since June. Similarly, parents reported an increase in child behavioral problems in April 2020, a trend that has remained relatively stable since that time (RAPID-EC, n.d.). In addition to mental health changes observed since the start of the pandemic, COVID-19 impacts on substance use have been discussed throughout this report. Given the interaction between emotional health, substance use, and physical wellbeing, it will be critical to continue to collect and study this type of information in order to address public health needs.

Just as a positive state of overall health is more than the absence of disease, mental wellness is more than the absence of mental illness; it "…is an integral part of health…determined by a range of socioeconomic, biological and environmental factors…." (World Health Organization, 2018). Chapter 13 of this report includes a discussion of protective factors that contribute to emotional wellbeing in addition to substance use prevention.[16]

Delaware Overview

Findings from the 2018-2019 National Survey on Drug Use and Health (NSDUH) estimate that approximately 20% of adults aged 18 and over in Delaware experienced any mental illness and approximately 5.4% experienced a serious mental illness in the preceding year (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.). The same survey estimates that approximately 8.5% of Delaware adults experienced a major depressive episode in the previous year and one in 20 had serious thoughts of suicide (SAMHSA, n.d.). These estimates are slightly higher than the rates reported in the 2020 Delaware State Epidemiological Profile

[16] For a discussion of adverse childhood experiences (ACEs) which can lead to lifelong emotional and physical challenges, please see Chapter 11.

(Center for Drug and Health Studies, 2020). NSDUH findings also indicate that nearly 17% of Delaware adults received mental health services in the preceding year (SAMHSA, n.d.). According to America's Health Rankings which draws upon multiple data sources to report on various aspects of community health, in 2019, 13.5% of all adults in Delaware experienced frequent mental distress. Young Delaware adults (aged 18-44) were most likely to report experiencing frequent mental distress (United Health Foundation [UHF], n.d.). The age-adjusted suicide rate for Delaware in 2018 was 11.4 deaths per 100,000 (Delaware Department of Health and Social Services, Division of Public Health, n.d.). According to the Division of Forensic Science, there were 125 suicide deaths in the state in 2020 (Delaware Division of Forensic Science, 2021).

The 2017 Delaware High School Youth Risk Behavior Survey (YRBS) indicates that one in four high school students reported they had felt sad or hopeless almost every day for two weeks or more in a row in the previous year. Seven percent reported that they had attempted suicide in that time frame, which is similar to national YRBS rates. Eleven percent of Delaware middle school students responding to the 2019 YRBS reported that they had purposely hurt themselves without wanting to die during the past year. From 2013 to 2019, the percentage of middle school students who reported on the YRBS they had ever attempted suicide increased from 6.8% to 8.5%.

The Delaware School Survey (DSS) also includes questions regarding students' mental health and wellbeing. In 2020, one in five eight graders reported symptoms of anxiety on more than half of the days in the previous two weeks and 16% reported feelings of depression. Female students were two and half times as likely to report feeling depressed or anxious compared to male students.

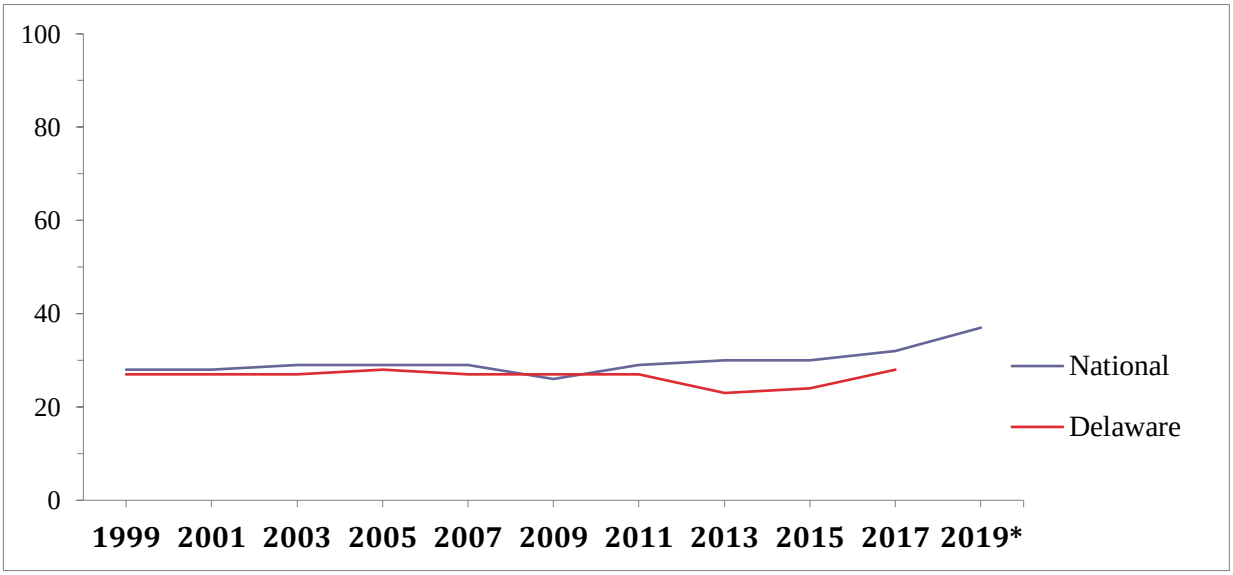
Several questions on the DSS are based on the Cantril Ladder, which asks the following: *Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.* On a positive note, when asked to rate themselves where they stood at the time of the survey using the Present ladder, two-thirds of 8th graders rated themselves in the top tier of the ladder[17] which is considered to be *thriving*. One in five students rated themselves in the middle tier which is considered to be *struggling*, and 14% rated themselves on the bottom tier, considered to be *suffering*. When asked where they envisioned they would be in five years, three-quarters saw themselves in the top tier, which suggests that the majority of students feel hopeful about the future, and the number of students who envisioned themselves in the lowest tier was reduced by half. Also noteworthy, when students were asked to rate their emotional health, slightly more than half of 8th graders rated it as either *excellent* (27%) or *very good* (26%), with another quarter rating it as *good*. Seven percent rated it as *poor*.

[17] The Present and Future Scales vary slightly. The Present scale categorizes steps 7-10 as *Thriving* and steps 5-6 as *Struggling*. The Future scale categorizes steps 8-10 as *Thriving* and 5-7 as *Struggling*. Both scales categorize steps 0-4 as *Suffering*.

These numbers illustrate that there is a profound need for mental health services for youth, as well as adults, in Delaware. In 2020, Delaware had 288.8 mental health providers per 100,000 people, a slight increase from previous years (UHF, n.d.). Since 2013, the Department of Services for Children, Youth and their Families has also deployed behavioral health consultants in most middle schools throughout the state to provide screening and other preventive services on-site. Nonetheless, the needs remain great, particularly for specialized services and for southern Delaware; according to the Health Resources and Services Administration (HRSA), Sussex County has a shortage of mental health facilities and received a Health Professional Shortage Area score of 18 or above, which qualifies as a high-priority area (Health Resources and Services Administration [HRSA], 2017).

A number of new initiatives have enhanced access to mental health resources in the state. In 2018, Delaware received several new federal grants to promote mental wellness among youth, including Project DelAWARE and the Delaware Child Psychiatry Access Program. Mentalhealthde.com is a website recently launched to provide information on mental wellness, suicide prevention, and videos with practical tips for educators, parents, and a special section dedicated to teens. The Delaware Hope Line is a 24/7 helpline designed to assist Delawareans cope with the stress and behavioral health needs that may have been exacerbated by the COVID-19 pandemic, or who are experiencing challenges connecting to needed services. It provides a single point of contact for callers to connect with the full range of resources available through the Delaware Division of Substance Abuse and Mental Health (DSAMH). Callers can reach the Hope Line at: 1-833-9-HOPEDE (1-833-946-7333). Behavioral health tips and reminders are also available by texting DEHOPE to 55753. DSAMH also recently launched Treatment Connections, a public portal to assist people seeking mental health and substance use disorder treatment. In addition, Delaware participates in the national Crisis Text Line, a promising practice for youth mental wellbeing, which is highlighted at the end of the following series of graphs.

Youth Risk Behavior Survey
National and Delaware High School Students
Feeling Sad or Depressed Almost Every Day for Two Weeks, Past Year, 1999-2019
(in percentages)



Year	National	Delaware
1999	28	27
2001	28	27
2003	29	27
2005	29	28
2007	29	27
2009	26	27
2011	29	27
2013	30	23
2015	30	24
2017	32	28
2019	37	-

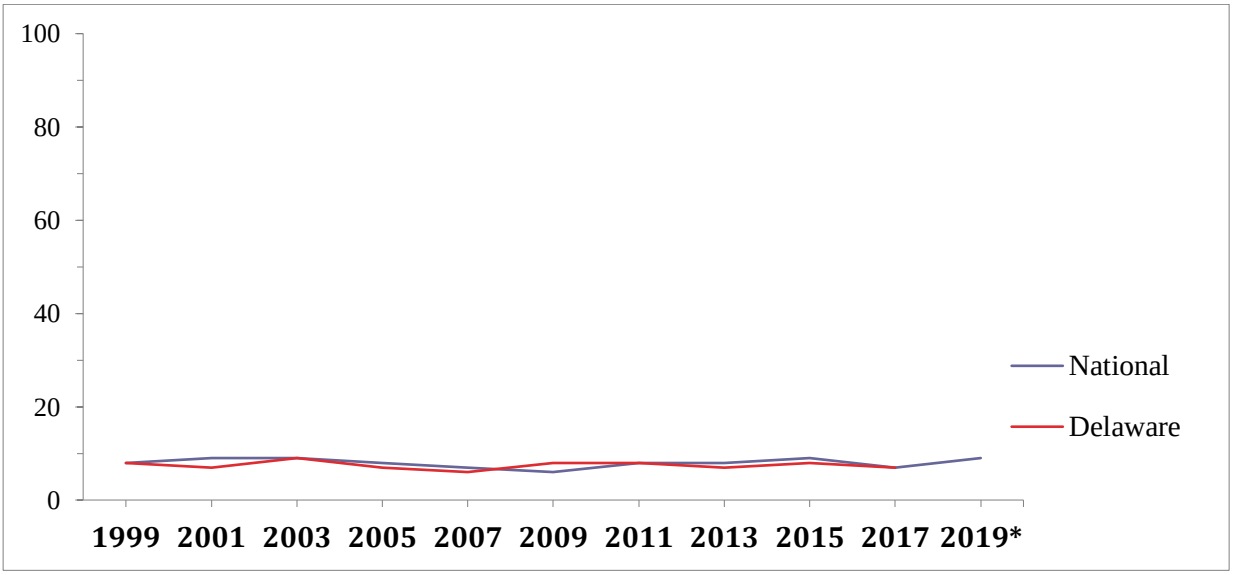
Figure 111: Trends in feeling sad/hopeless almost every day for 2 or more weeks, HS

Note: *National data is weighted; Delaware data is weighted except for in 2019, which is unavailable.

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

Youth Risk Behavior Survey
National and Delaware High School Students
Trends in Attempted Suicide in the Past Year, 1999-2019
(in percentages)



Year	National	Delaware
1999	8	8
2001	9	7
2003	9	9
2005	8	7
2007	7	6
2009	6	8
2011	8	8
2013	8	7
2015	9	8
2017	7	7
2019	9	-

Figure 112: Trends in attempted suicide in the past year, HS

Note: *National data is weighted; Delaware data is weighted except for in 2019, which is unavailable.

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

2019 YRBS Middle School Survey

Students Who Purposely Hurt Themselves within the Past Year Without Wanting to Die*, by Sex, Grade, and Race/Ethnicity (in percentages)

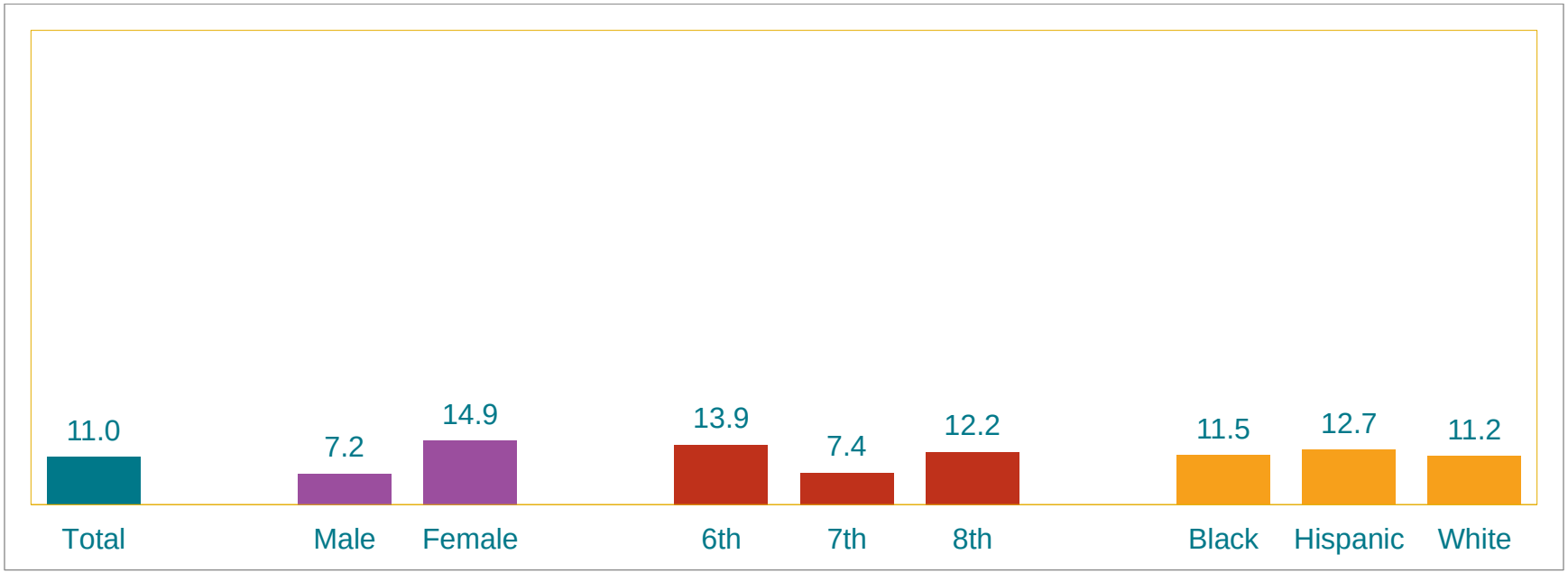


Figure 113: Students who purposely hurt themselves without wanting to die, by sex, grade, race and ethnicity, MS

Notes: *Such as cutting or burning themselves on purpose, during the 12 months before the survey
†F > M; 6th > 7th, 8th > 7th (Based on t-test analysis, $p < 0.05$.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
This graph contains weighted results.

Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

YRBS Middle School Survey

Students Who Ever Seriously Thought About Killing Themselves, 2007-2019 (in percentages)

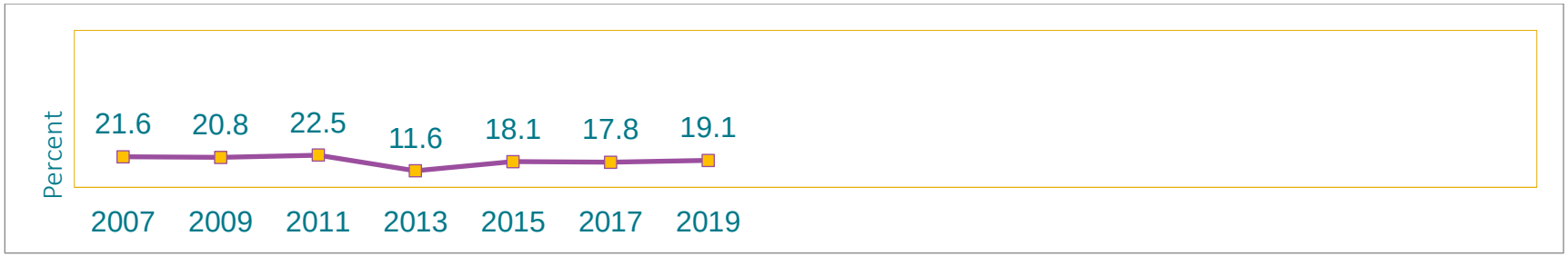


Figure 114: Students who ever seriously thought about killing themselves, 2007-2019, MS

Notes: *Decreased 2007-2019, decreased 2007-2013, increased 2013-2019 [Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade ($p < 0.05$). Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).].

Students Who Ever Tried to Kill Themselves, 2013-2019 (in percentages)

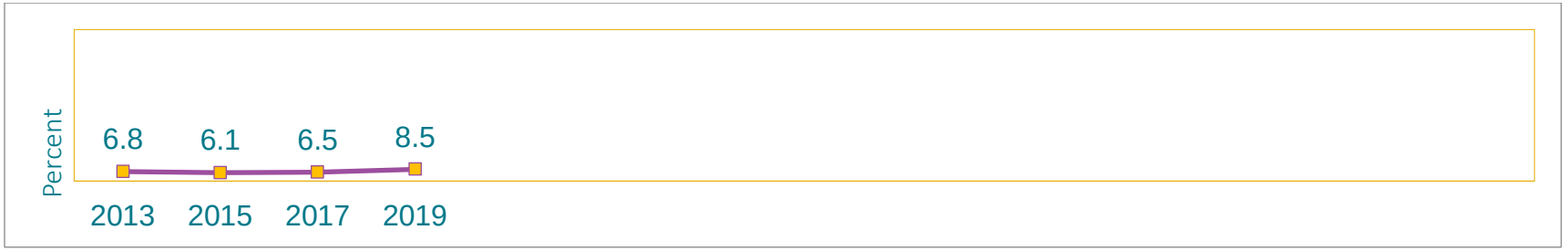


Figure 115: Students who ever tried to kill themselves, 2013-2019, MS

Notes: *Increased 2013-2019 [Based on linear trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade ($p < 0.05$). Graphs contain weighted results.

Source: "2019 Delaware Youth Risk Behavior Survey, Middle School." Delaware Middle School Graphs. Centers for Disease Control and Prevention.

Back to table of figures

2020 Delaware School Survey
Anxiety* in the Past Two Weeks by Sex, Race, and Ethnicity among 8th Grade Students (in percentages)

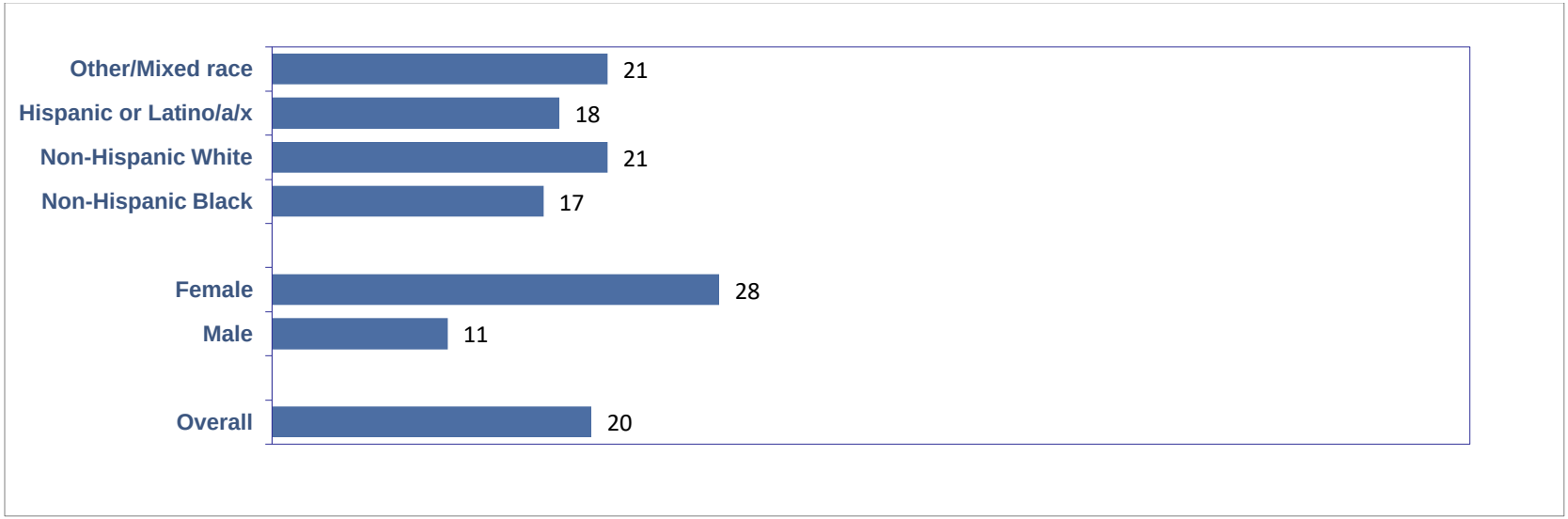


Figure 116: Anxiety in past two weeks by sex, race and ethnicity, 8th grade

Note: *Anxiety here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey

Depression* in the Past Two Weeks by Sex, Race and Ethnicity among 8th Grade Students (in percentages)

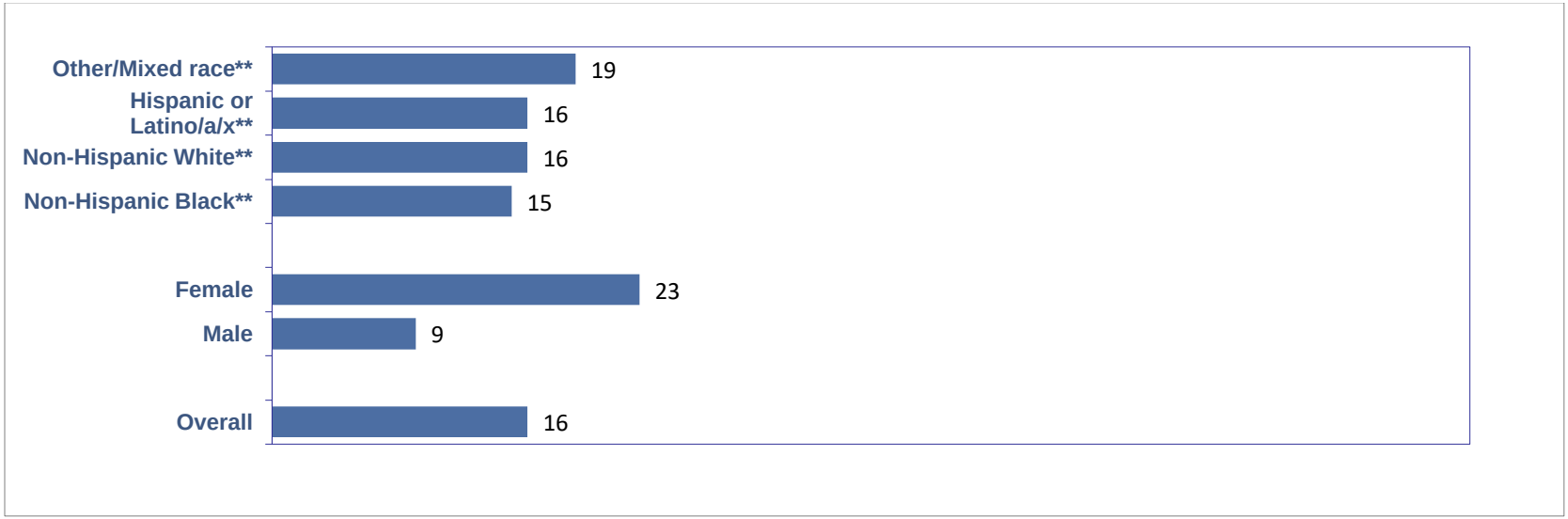


Figure 117: Depression in past two weeks by sex, race and ethnicity, 8th grade

Note: *Depression here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.
**The association between race, ethnicity, and reported feelings of depression was not statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey
Wellbeing Index*, Now and Five Years in the Future, Among 8th Grade Students (in percentages)

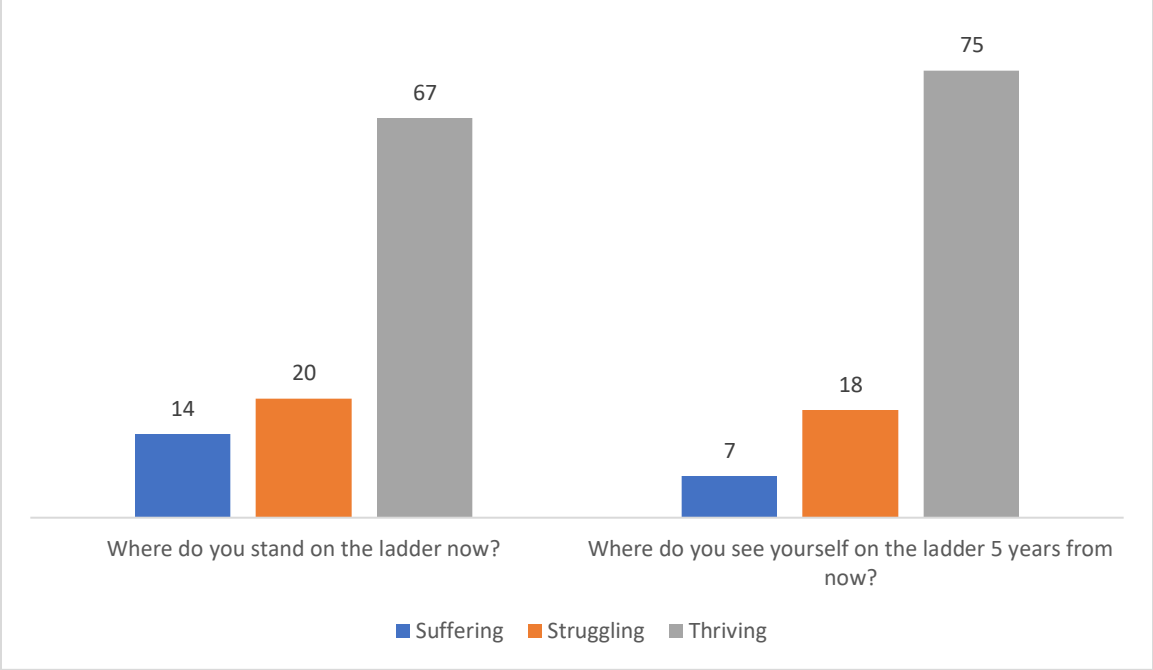


Figure 118: Wellbeing index, now and future, 8th grade

Note:
*The Wellbeing Index is estimated using two questions on the school survey modeled on Cantril's Ladder, which asks students to imagine a ladder with steps numbered from zero at the bottom and ten at the top. The top of the ladder represents the best possible life for the student, and the bottom of the ladder represents the worst possible life. Students are asked to respond with which step of the ladder they feel that they personally stand on now, and on which step of the ladder they think they will stand on in five years. Present and Future scales vary slightly. The Present scale categorizes steps 7-10 as *Thriving* and steps 5-6 as *Struggling*. The Future scale categorizes steps 8-10 as *Thriving* and 5-7 as *Struggling*. Both scales categorize steps 0-4 as *Suffering*.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey
Emotional Health* among 8th Grade Students
(in percentages)

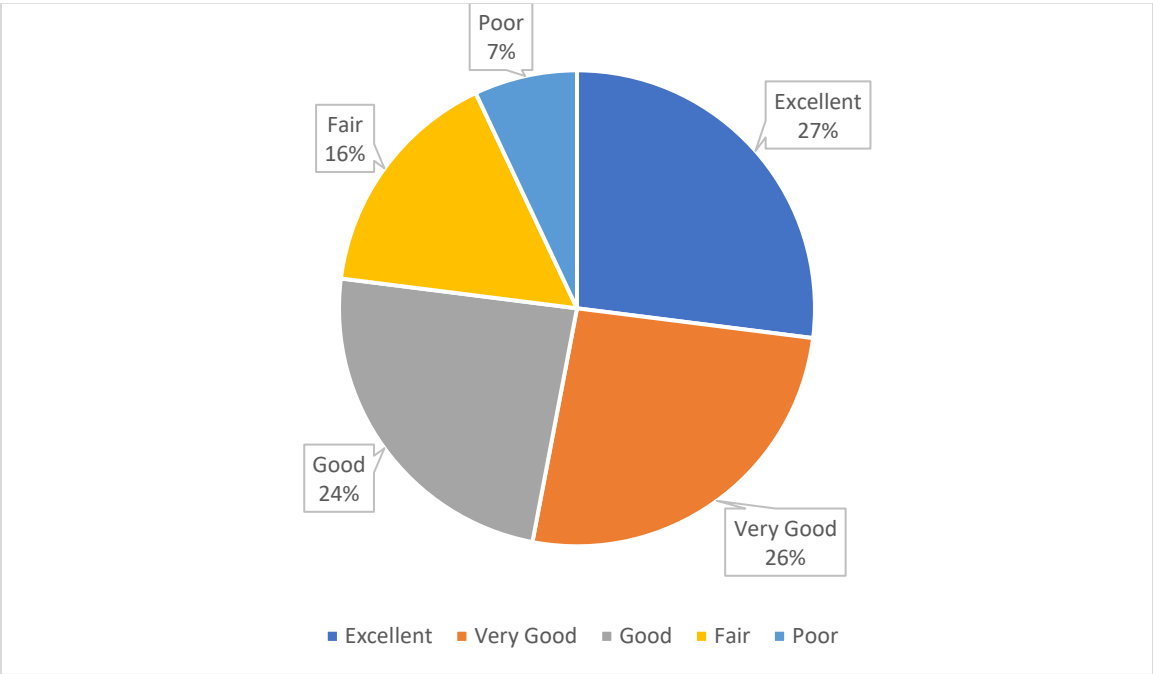


Figure 119: Self-rated emotional health, 8th grade

Note:
*Students are asked: "In general, how would you rate your emotional health?" and provided with five response categories: *excellent, very good, good, fair,* or *poor*.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

Promising Practices: The Crisis Text Line

Crisis texting services are considered promising practices in suicide prevention. The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) sponsors the Garrett Lee Smith Suicide Prevention initiative, which funded the Department of Services for Children, Youth and their Families (DSCYF) to conduct *Project SAFETY* in Delaware through June 2020. The agency partnered with Crisis Text Line (CTL), a nonprofit organization that provides crisis texting services staffed by trained volunteers who respond to the texters, providing support and information, and, whenever necessary, triggering an active rescue. Staffers code the conversations according to keywords. When a texter uses a specific designation, data is collected to highlight aggregate characteristics of those conversations.

The first chart below provides the frequency of CTL conversations that have been attributed to Delaware's *Project SAFETY* designation (text DE to 741741). As of August 24, 2021, CTL had 2,058 registered conversations under this classification and there had been 11 active rescues. The second chart illustrates the topics of conversations by those using CTL as coded by the trained volunteers. Relationships, anxiety and stress, and depression and sadness are the top-three topics coded, followed by suicide, which was identified in 19% of conversations. COVID-19 was a topic discussed in 6% of conversations.

Monthly Frequency of Crisis Text Line Conversations

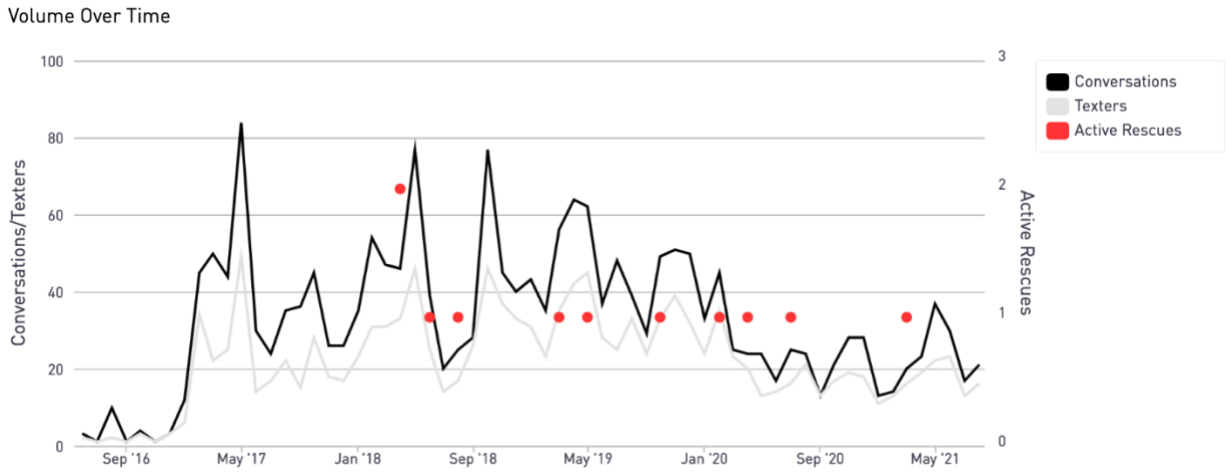


Figure 120: Frequency of conversations, texters, and active rescues, 2016-21

Topics of Crisis Text Line Conversations
(in percentages

ISSUE	FILTERED GROUP
Relationship	38.9%
Anxiety/Stress	34.0%
Depression/Sadness	31.5%
Suicide	19.2%
Isolation/Loneliness	15.1%
Self Harm	10.9%
COVID-19	6.0%
3rd Party	4.9%
Grief	4.6%
Bullying	4.0%
Abuse, emotional	3.0%
Eating Body Image	2.7%
Abuse, sexual	2.1%
Gender/Sexual Identity	2.0%
Abuse, physical	1.7%
Substance Abuse	1.4%

Figure 121: Crisis text line conversation topics
Source: Crisis Text Line

Back to table of figures

10. Persons with Disabilities

National Overview

Various data sources estimate that approximately 12% to 26% of Delaware residents have a disability, and 14% to 31% of children have a functional difficulty.

Delaware adults who report having a disability are more likely to report smoking, e-cigarette use, obesity, and depression. Youth who report a disability are more likely to report substance use and indicators of anxiety and depression.

People with disabilities make up a substantial portion of the general population. Due to variations in how disability is defined and measured, epidemiological studies of behavioral health outcomes are limited and lead to differences in population estimates. There are three standard approaches to measuring disability: a medical approach that measures prevalence by diagnostic codes; a functional approach that measures disability by difficulties in tasks of daily living; and sociological approaches, which consider the accommodations needed for inclusion, accessibility, and daily functioning (McDermott and Turk, 2011). The U.S. Department of Health and Human Services established data collection standards for the identification of disability status, which includes the use of a series of six questions on population-based surveys relevant to categories of functional challenges. These six categories include hearing, visual, cognitive, ambulatory, self-care, and independent living disabilities. In addition, people with attention deficit/hyperactivity disorder (ADHD), anxiety, depression, or other behavioral health disorders may experience similar difficulties in daily functioning and adverse health outcomes.

An analysis of data from the Behavioral Risk Factor Surveillance System (BRFSS) by researchers from the Centers for Disease Control and Prevention (CDC) found that in 2016, approximately one in four noninstitutionalized adults in the U.S. reported that they have a disability. This study found that people with disabilities often face significant health disparities in comparison to the general population, including disparate health outcomes and reduced healthcare access (Okoro, Hollis, Cyrus, & Griffin-Blake, 2018). Researchers have also found disparate health outcomes for people with disabilities related to substance use, particularly increased use of tobacco and opioids. An analysis of data from the National Survey on Drug Use and Health (NSDUH) found that people who report having a work-related disability or receiving Medicare under the age of 65 (which, in most cases, indicates that the person has a disability) report higher rates of substance use, particularly heroin or oxycodone, than other populations (Glazier & Kling, 2013). Additional studies have also found higher rates of opioid prescribing, opioid and other prescription drug misuse, opioid use disorders, and fatal overdoses among people with disabilities (Ford, Hinojosa, Nicholson, 2018; Hong, Geraci, Turk, Love, McDermott, 2019; Lauer, Henly, & Brucker, 2019; Song, 2017).

In a recent survey conducted as part of the COVID-19 Outbreak Public Evaluation (COPE) initiative, nearly two-thirds of adults with disabilities reported adverse mental health impacts or new or increased substance use, compared to 36% of adults without disabilities. Adults with disabilities who had been diagnosed with a mental health or substance use disorder were also more likely to report difficulties related to the pandemic in accessing treatment (Czeisler et al., 2021).

Delaware Overview

Prevalence estimates suggest that between 12.7% (American Community Survey [ACS], 2015-2019) and 25.5% (Behavioral Risk Factor Surveillance System [BRFSS], 2019) of Delaware residents have a disability. This wide variance in estimates is likely due to different surveying methods, survey instruments, and the ages of those surveyed. Disability prevalence increases as people age. As the figure from the American Community Survey indicates, approximately one in five Delawareans aged 65-74 report having a disability but this number doubles to 43.3% among people aged 75 and over (ACS 2015-2019).

The National Survey of Children's Health provides additional context for children in Delaware. Most recent data (2018-2019) indicates that 14.7% of children in Delaware have one functional difficulty[18] and 14.6% have two or more. According to parent respondents, more than one in ten (11.6%) of children aged 3 to 17 currently have attention deficit or attention deficit with hyperactivity disorder. Respondents also reported that 22% of youth have a mental, emotional, behavioral, or developmental problem. Approximately 4% are identified as having autism spectrum disorder.

According to the Delaware Department of Education (DOE), 16.8% of students currently enrolled in public schools have a disability. As required by the Individuals with Disabilities Education Act (IDEA), the DOE provides additional data related to this population. During the 2017-2018 school year, 20,580 children and youth with disabilities aged 6 to 21 were enrolled in Delaware schools; nearly 66% of these students spent 80% or more of their school day in a regular classroom setting. Nearly half of the students aged 6 to 21 enrolled with a disability have a specific learning disability that entails having difficulties with listening, speaking, reading, writing, and understanding math (*e.g.,* dyslexia, dysgraphia) that are not a result of some other disability. An additional 2,616 students with disabilities, aged 3 to 5, were enrolled

[18] Functional difficulty, as defined by the National Survey of Children's Health, requires one of 12 of the following conditions: frequent or chronic respiratory problems (past year); difficulty eating or swallowing (past year); stomach/intestinal problems (past year); repeated or chronic pain, including headaches (past year); difficulty using hands (0-5 years); difficulty with coordination and movement (0-5 years); serious difficulty concentrating, remembering, or making decisions (6-17 years); serious difficulty walking or climbing stairs (6-17 years); difficulty dressing or bathing (6-17 years); difficulty doing errands alone (12-17 years); deafness/hearing problems; and blindness or vision difficulties even when wearing glasses.

in public schools during this time period (Delaware Department of Education, IDEA Child Count and Educational Environment, Ages 6-21 and 3-5).

In line with national research, one public health assessment of the Delaware population with disabilities found that people with disabilities face significant health disparities in comparison to the general population, including increased incidence of some cancers, heart disease, dental problems, diabetes, current smoking, and depression. People with disabilities also reported reduced healthcare access and decreased preventive cancer screening (Sparling et al., 2015). Data from the 2019 BRFSS indicates considerably higher prevalence rates for smoking status, e-cigarette use, obesity, and depression for Delaware adults with disabilities (CDC, Disability and Health Data System, n.d.).

Youth survey data also indicate elevated risk of adverse outcomes for students who have a disability compared to students who do not. Three in ten 8th grade students responding to the 2020 Delaware School Survey reported having a disability.[19] Students who reported having a disability also reported higher rates of all substance use and poorer mental health outcomes.[20]

It is important to note that these data were collected before the COVID-19 pandemic and stay-at-home orders took effect in Delaware. Given that early research suggests there have been increases in substance use and mental health concerns for some people since the pandemic began, persons with disabilities, already experiencing disproportionate risk for behavioral health challenges, may be even more vulnerable than these data illustrate.

[19] Disability status from the Delaware School Survey includes having a serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability.

[20] The Delaware School Survey analysis highlighted in this report incorporates responses from students who self-identify as having a disability as well as those who reported that they have been diagnosed with a physical, mental, or emotional disability by a medical professional.

American Community Survey[a] 5-Year Estimates, 2015-2019

Disability Prevalence in Delaware, by Age
(in percentages)

Disability by Age	%
Under 5 years	0.7
5 to 17 years	5.7
18 to 34 years	6.7
35 to 64 years	12.2
65 to 74 years	22.4
75 years and over	43.3

Figure 122: Disability prevalence by age group

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates.

Disability Prevalence in Delaware, by Type
(in percentages)

Disability by Type	%
Total Disabilities[b]	**12.7**
Hearing Difficulty	3.1
Vision Difficulty	2.0
Cognitive Difficulty	5.3
Ambulatory Difficulty	6.9
Self-Care Difficulty	2.7
Independent Living	5.6

Figure 123: Disability prevalence by type

Notes:
[a] American Community Survey estimates include both adult and children populations.
[b] Some individuals may report multiple types of disabilities, so the total disability prevalence will not equal the sum of the prevalence of individual disability types.

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates.

Back to table of figures

American Community Survey[a] 5-Year Estimates, 2015-2019

Disability Prevalence in Delaware

Disability by Race and Hispanic or Latino Origin	%
White	13.2
Black or African American	12.3
American Indian and Alaskan Native	30.7
Asian	5.6
Native Hawaiian or Other Pacific Islander	7.1
Other Race	10.3
Two or More Races	10.6
Hispanic or Latino (of any race)	8.4

Figure 124: Disability prevalence by race and Hispanic or Latino origin

Note:
[a] American Community Survey estimates include both adult and children populations.

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates.

Back to table of figures

2019 Behavioral Risk Factor Surveillance System[a]
Disability[b] Prevalence by Type, Delaware and National Estimates (in percentages)

	Delaware	USA
Any disability[c]	25.5	26.7
Cognitive disability	11.0	12.0
Hearing disability	5.4	5.9
Mobility disability	12.0	12.8
Vision disability	4.6	5.0
Self-care disability	3.2	3.8
Independent living disability	5.2	7.0

Figure 125: Disability status by type, Delaware and national estimates, adults 18+

Notes:
[a] The Behavioral Risk Factor Surveillance System (BRFSS) surveys only the adult population.
[b] Disability is defined in the BRFSS as at least one of the following: serious difficulty hearing; serious difficulty seeing; serious difficulty concentrating, remembering or making decisions due to a physical, mental or emotional condition; serious difficulty walking or climbing stairs; difficulty dressing or bathing; or having difficulty doing errands alone because of a physical, mental, or emotional condition.
[c] Some individuals may report multiple types of disabilities, so the total disability prevalence will not equal the sum of the prevalence of individual disability types.

Source: 2019 Delaware Behavior Risk Factor Surveillance System. Disability and Health Data System (DHDS), Centers for Disease Control and Prevention.

Back to table of figures

2020 Delaware School Survey
Disability[a] among Delaware 8th Graders

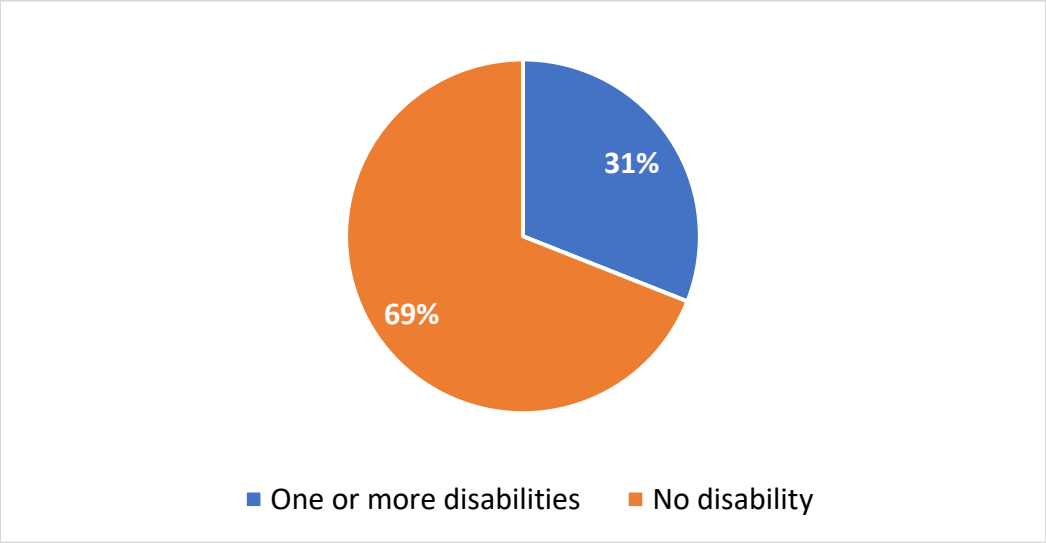


Figure 5: Disability prevalence among 8th graders

Note: [a] Disability is defined as serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability identified by the student or a doctor/healthcare professional.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey
Disability[a] Prevalence by Sex and Race/Ethnicity among Delaware 8th Graders (in percentages)

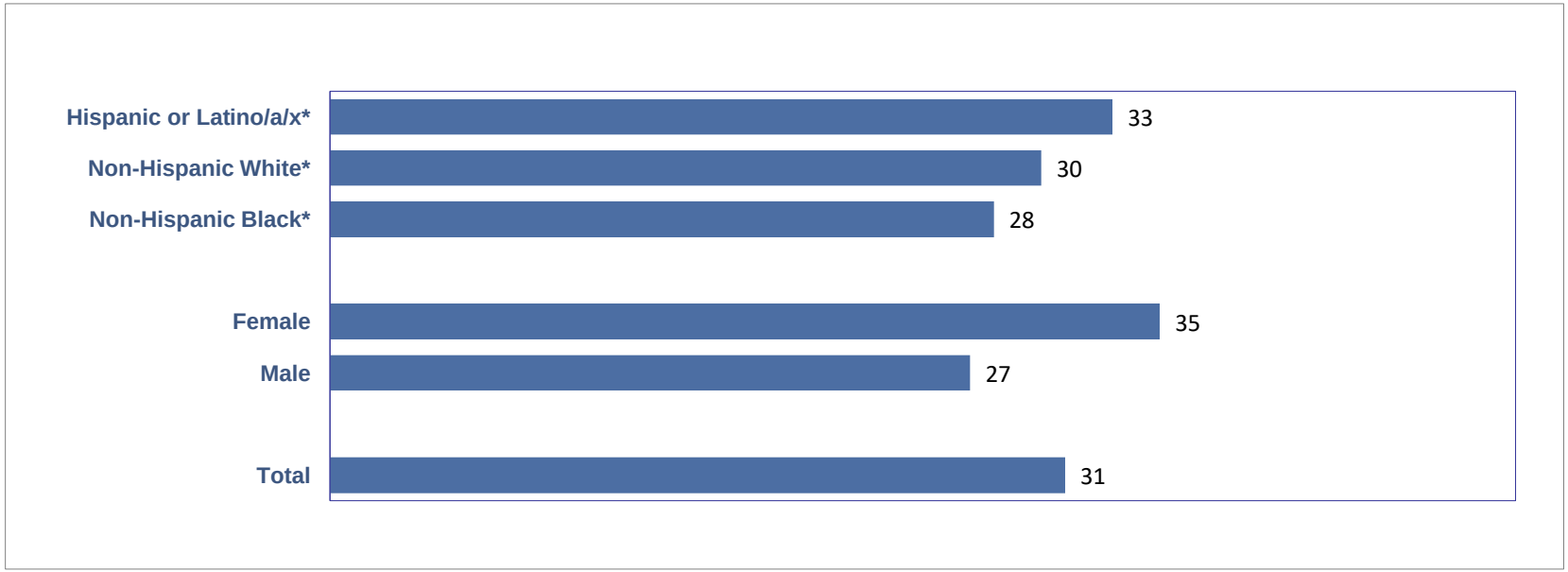


Figure 126: Disability prevalence by sex and race/ethnicity, 8th grade

Notes:
[a] Disability is defined as serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability identified by the student or a doctor/healthcare professional.
*Estimates were not statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2019 Delaware Behavioral Risk Factor Surveillance System

Smoking, Alcohol Use, and Mental Health by Disability[a] Status among Delaware Adults (in percentages)

	Adults with Disability	Adults without Disability
Current Smoker	27.6	13.2
Former Smoker	23.9	24.1
Never Smoker	48.5	62.7
Binge drinking in past 30 days	23.0	18.1
Mentally Unhealthy for 14+ days in the past 30	36.2	8.0
Ever had depression	41.0	13.5

Figure 127: Disability, smoking status, E-cigarette use, and depression, adults

Notes:

[a] Disability is defined in the BRFSS as at least one of the following: serious difficulty hearing; serious difficulty seeing; serious difficulty concentrating, remembering or making decisions due to a physical, mental or emotional condition; serious difficulty walking or climbing stairs; difficulty dressing or bathing; or having difficulty doing errands alone because of a physical, mental, or emotional condition.

Source: 2019 Delaware Behavior Risk Factor Surveillance System. Disability and Health Data System (DHDS), Centers for Disease Control and Prevention.

Back to table of figures

2020 Delaware School Survey
Disability[a] and Past Month Substance Use
Among 8th Grade Students
(in percentages)

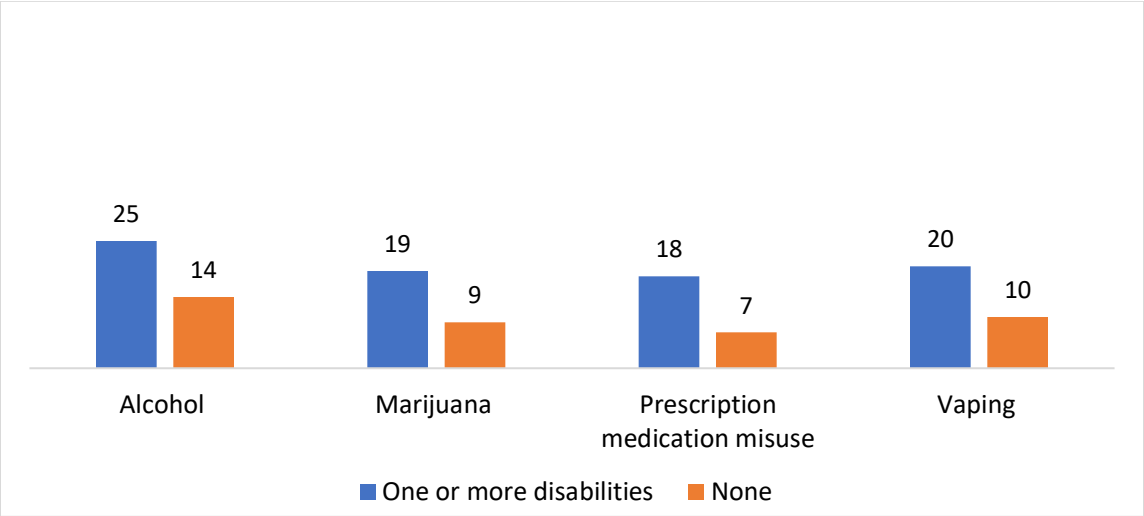


Figure 128: Disability and past year substance use, 8th grade

Notes: Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a] Disabilities are defined as serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability identified by the student or a doctor/healthcare professional.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

2020 Delaware School Survey
Disability[a] and Mental Health
Among 8th Grade Students
(in percentages)

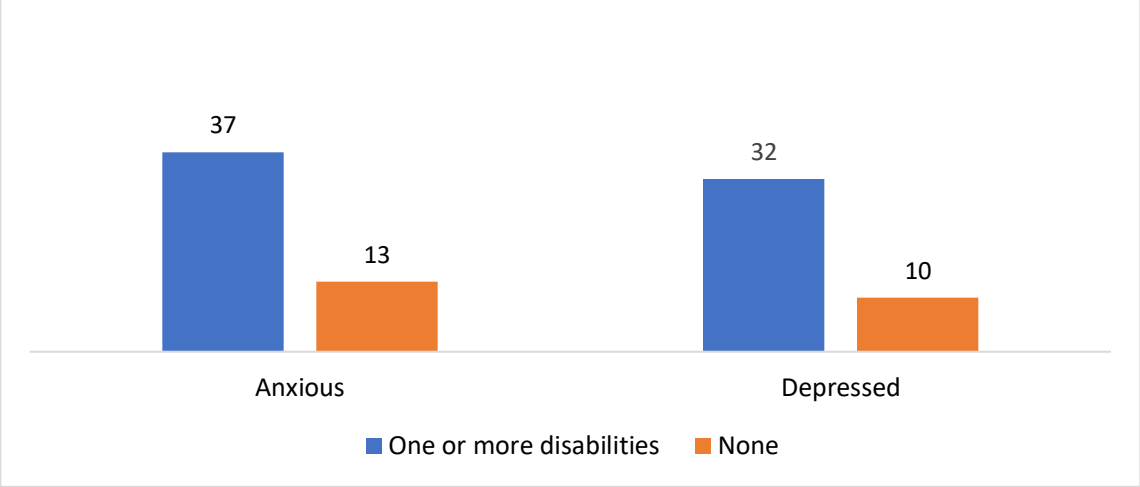


Figure 129: Disability and mental health, 8th grade

Notes: Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a] Disabilities are defined as serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability identified by the student or a doctor/healthcare professional.
[b] Anxious is defined as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks
[c] Depressed is defined as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

Back to table of figures

11. Adverse Childhood Experiences (ACEs)

National Overview

Adverse childhood experiences (ACEs) have been associated with negative health outcomes throughout the lifespan.

On various surveys, as many as 2 out of 3 adults and youths in Delaware report having experienced at least 1 ACE.

Adults in Delaware who report experiencing ACEs are more likely to report current symptoms of depression and rates of smoking. Delaware youth who report experiencing trauma are more likely to report using substances as well as symptoms of depression and anxiety.

Adverse childhood experiences (ACEs) are traumatic events or conditions, such as abuse, neglect, homelessness, and living with family members who have severe mental health or substance use problems. ACEs have been associated with toxic stress that impacts brain function and may impair coping, learning, and development (Trauma Matters Delaware, n.d.; Center on the Developing Child, Harvard University, n.d.). Research indicates that youth who experience significant traumas are at risk to experience poorer health outcomes throughout their lifespan. The number of ACES that an individual experiences has an accumulated impact, with some research indicating that individuals who experience six or more ACES have a shorter life expectancy by up to 20 years (Brown et al., 2009). However, the presence of a supportive and caring adult has been associated with higher rates of resilience among those who have experienced childhood trauma. In short, without intervention and support, children who experience traumatic events are likely to have increased health problems throughout their lives—lives that are likely to be shorter than the lives of others (Centers for Disease Control and Prevention [CDC], n.d.).

In the original ACEs study, conducted in the mid-90s (Felitti et al., 1998), more than 17,000 adults in an outpatient healthcare setting were asked to report on their childhood experiences regarding the following 10 indicators:

- emotional, physical, sexual abuse
- emotional and physical neglect
- parental divorce/separation
- living in a household with a person who has a mental illness
- living in a household with a person who abuses substances
- parental incarceration
- exposure to domestic violence

Nearly two out of three respondents reported experiencing one or more ACE, with one in eight participants experiencing four or more (CDC, n.d.). Since then, various researchers have examined additional indicators, such as bullying, discrimination, economic hardship, racism, and violence within the community (Fink, 2016; Pachter et al., 2017). More recently, the Behavioral Risk Factor Surveillance System (BRFSS) data collected across 25 states from 2015 to 2017 indicates that nearly six in ten individuals in the U.S. experienced at least one ACE, and that one in six (15.6%) experienced four or more (Merrick et al., 2019). The more ACEs an individual experiences, the greater the likelihood he or she will experience poorer health status (Hussaini et al., 2016).

Delaware Overview

To address this public health challenge, in 2018 Governor John Carney issued Executive Order 24 to establish Delaware as a "trauma-informed state[21]" to mitigate the impact of childhood adversities and foster resilience at the individual, family, and community levels. First Lady Tracey Quillen Carney initiated the Trauma-Informed Delaware coalition bringing together public, private, and non-profit organizations. Subsequently, the Family Services Cabinet Council's Trauma-Informed Care Progress Report and Action Plan was released, and Delaware's inaugural Trauma Awareness Month was observed in May 2019 with a statewide symposium, multiple advocacy events, and the Compassionate Champion Awards. Since then, stakeholders have collaborated to develop a blueprint and a series of work groups have been established to advance the progress of becoming a trauma-informed state. More recently, Trauma Matters Delaware (TMD), formerly a steering group of advocates, reorganized to become a nonprofit backbone organization seeking to coordinate and leverage efforts to reduce trauma and enhance resilience.

Available data suggest that Delawareans experience rates of childhood adversity similar to national rates. In 2015, the Delaware Public Health Institute conducted the Delaware Household Health Survey, which asked adult respondents about their experiences with childhood trauma. Half of adults in Delaware reported experiencing one or more of the original ACEs, with 13.8% reporting four or more. The most commonly identified ACEs were parental divorce or separation (31.7%), followed by living in a household with someone with a substance use disorder (20.6%). When factoring in being bullied and/or experiencing discrimination (two

[21] According to the Trauma Matters Delaware (TMD) website, "Trauma informed care is an intentional approach to understanding and interacting with people who have or may be experiencing trauma. It assumes that most people are likely to have at least one traumatic event at some point in their lives and that, for some, this impacts the way they perceive the world and engage with others….By asking *'what happened to you?'* rather than *'what's wrong with you?'* trauma informed approaches foster accepting and supportive environments that can minimize the impact of traumatic events and prevent re-traumatization….". The TMD website provides more information on the guiding principles of and resources for these approaches.

indicators added to the survey), 59% of adults reported having at least one ACE, with 16% reporting four or more (Public Health Management Corporation, 2016; Fink, 2016).

For the first time in 2019, the Delaware Division of Public Health (DPH) included the optional ACEs module in the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) survey. In July 2021, Dr. Khaleel Hussaini[22] presented highlights of the BRFSS ACEs data to the State Epidemiological Outcomes Workgroup (SEOW). BRFSS findings reveal that ACEs are common in Delaware; approximately two out of three adults experienced at least one ACE, with 43.3% experiencing two or more. Similar to the Delaware Household Health Survey, the most common adversity reported was living with divorced or separated parents (28.5%), followed by living with a problem drinker (23.5%), exposure to domestic violence (18%), and living with someone with a mental illness (17.3%). Approximately one in 10 adults reported they had been physically abused by a parent or touched sexually as a child (11% and 10.1%, respectively). Nearly 9% reported that a household member had been incarcerated during their childhood. Female respondents were more likely to have had exposure to two or more ACEs than male respondents. Notable health outcomes associated with exposure to one or more ACE include: fair or poor health status among female respondents; current depression and current smoking among both female and male respondents; and current heavy drinking among male respondents. (Hussaini, K. & Delaware Division of Public Health, 2021.)

In terms of youth data, since 2011 the National Survey of Children's Health (NSCH) has included a number of indicators relating to trauma and resiliency within the household. The survey, administered to parents who report on the health of their children, does not include questions on abuse or neglect. NSCH 2016-2019 data includes an aggregate sample of 2,485 parent respondents. Dr. Hussaini presented ACEs highlights from the NSCH at the January 2021 SEOW meeting which indicated that approximately 43% of children in Delaware experience at least one ACE, most commonly having divorced/separated parents or economic hardship. The third most common ACE is living with a person with a substance use disorder, followed by parental incarceration. Parents report that 6.1% of children have been treated unfairly because of race, one of several indicators on the rise, including parental divorce and separation, parent or guardian death, and having been the victim of violence. More than one in five (21.9%) of Delaware youth have been exposed to two or more ACEs. There are certain groups who experience higher rates of ACEs, including youth who are Black (non-Hispanic), whose parents were born outside of the US, who are poor, or who have special healthcare needs. Conversely, children in families with high levels of resilience were less likely to have been exposed to multiple ACEs[23] (Hussaini, 2021).

The Delaware School Survey (DSS) includes a number of questions that address trauma, such as parental incarceration, exposure to various types of violence, and parental substance use and

[22] Dr. Hussaini is a CDC senior scientist and epidemiologist serving as a Maternal and Child Health Assignee to the Delaware Department of Health and Social Services, Division of Public Health.
[23] For more on the NSCH Family Resilience Index, please see Chapter 13 of this report, Protective Factors.

mental illness. Because the survey also includes questions regarding student substance use and mental health, the data provides us with an opportunity to explore the association between traumatic experiences and a spectrum of risk behaviors and other experiences. Two out of three 8th graders who responded to the 2020 DSS reported experiencing at least one ACE, and nearly one in four revealed having exposure to three or more. Most commonly, students reported being bullied (30%), being hit by another teen (25%), living with someone with a substance use disorder (24%), witnessing violence at home (22%), and living with someone with mental illness (22%). The results of the 2020 DSS illustrate that youth who report experiencing trauma have higher rates of all substance use, as well as symptoms of depression. Students who experience multiple ACEs have even greater rates of substance use or mental health concerns.[24]

By examining these associations, policy analysts and practitioners can begin to consider how early interventions and universally employed, trauma-informed approaches may improve lifelong health consequences and the associated costs for individuals, families, and society.

To view the slides on ACEs data presented to the SEOW network, please visit the SEOW Presentations page of the Center for Drug and Health Studies website. Recordings of the presentations are also available for viewing. For a discussion on protective factors that help to reduce risk behaviors and promote resilience, please see Chapter 13 Protective Factors of this report.

[24] It is important to note that while there is a statistical association between these factors, this does not necessarily mean that there is a causal relationship between these variables in every instance, and there may be additional unobserved indicators that also influence the outcome. This holds true for all of the associations discussed in this chapter.

2019 Delaware Behavior Risk Factor Surveillance System (BRFSS)

Prevalence of ACEs Stratified by Sex and Age

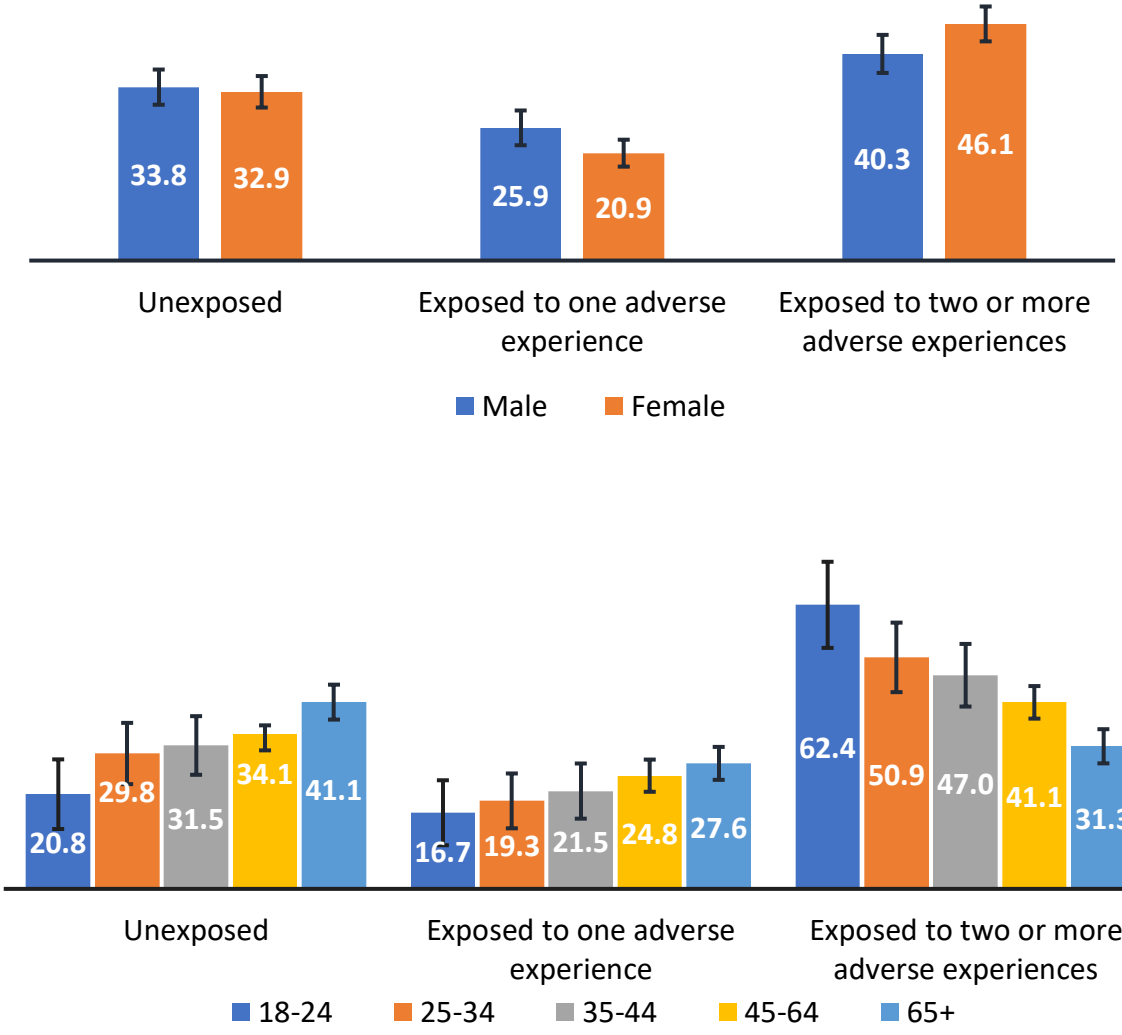


Figure 130: ACEs prevalence among adults in Delaware, by sex and age, 2019

Note: Weighted percent with 95% confidence intervals.
Source: Hussaini, K. Delaware Department of Health and Social Services, Division of Public Health, BRFSS, 2019. Adverse Childhood Experiences in Delaware, 2019. [Presentation], 2021

Back to table of figures

2019 Delaware Behavior Risk Factor Surveillance System (BRFSS)

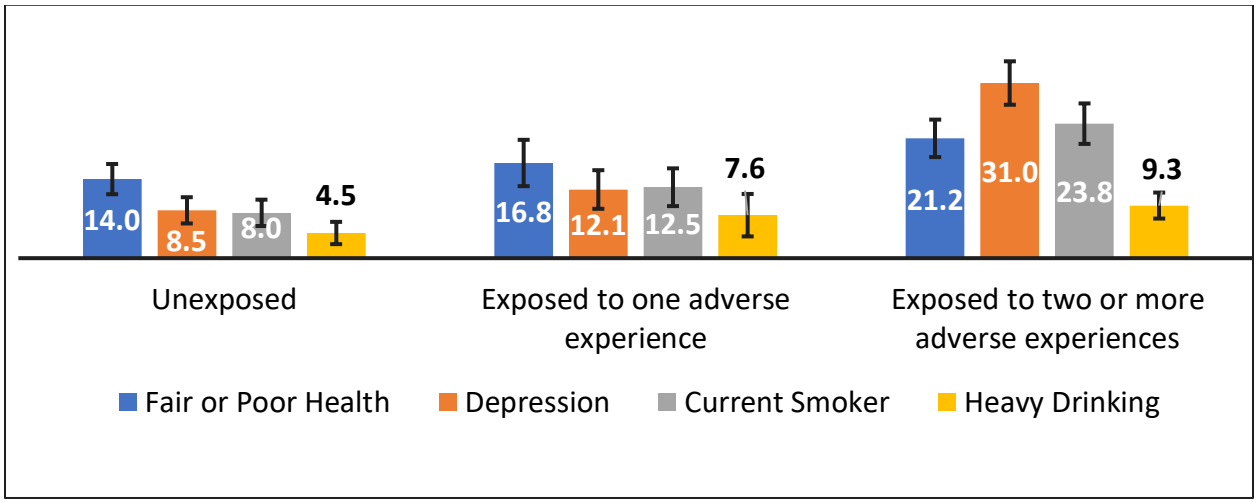


Figure 131: ACEs exposure and depression, smoking, and heavy drinking

Adverse Childhood Experience (ACE)	Sample Size* (n)	Percent^ (95%CI)
Household Dysfunction		
Live with anyone depressed, mentally ill, or suicidal?	484	17.3 (15.3-19.4)
Live with a problem drinker/alcoholic?	705	23.5 (21.3-25.7)
Live with anyone who used illegal drugs or abused prescriptions?	315	12.5 (10.6-14.3)
Live with anyone who served time in prison or jail?	215	8.9 (7.2-10.6)
Were your parents divorced/separated?	804	28.5 (26.1-30.9)
How often did your parents beat each other up?	533	18.0 (16.0-20.0)
Physical Abuse		
How often did a parent physically hurt you in any way?	408	11.0 (9.5-12.4)
Emotional Abuse		
How often did a parent swear at you?	505	13.0 (11.5-14.5)
Sexual Abuse		
How often did anyone ever touch you sexually?	349	10.1 (8.6-11.5)
How often did anyone make you touch them sexually?	275	8.2 (6.8-9.6)
How often did anyone ever force you to have sex?	173	4.8 (3.8-5.8)

Notes: Delaware Department of Health Services, Division of Public Health, BRFSS, 2019
*Unweighted sample size
^Weighted percentage with 95% confidence intervals (CI)
Number/Percent responding "Yes" and excludes DK/NS/Refused

Figure 132: ACEs prevalence by type among adults in Delaware, 2019

Source: Hussaini, K. Delaware Department of Health and Social Services, Division of Public Health, BRFSS, 2019. Adverse Childhood Experiences in Delaware, 2019. [Presentation], 2021

Back to table of figures

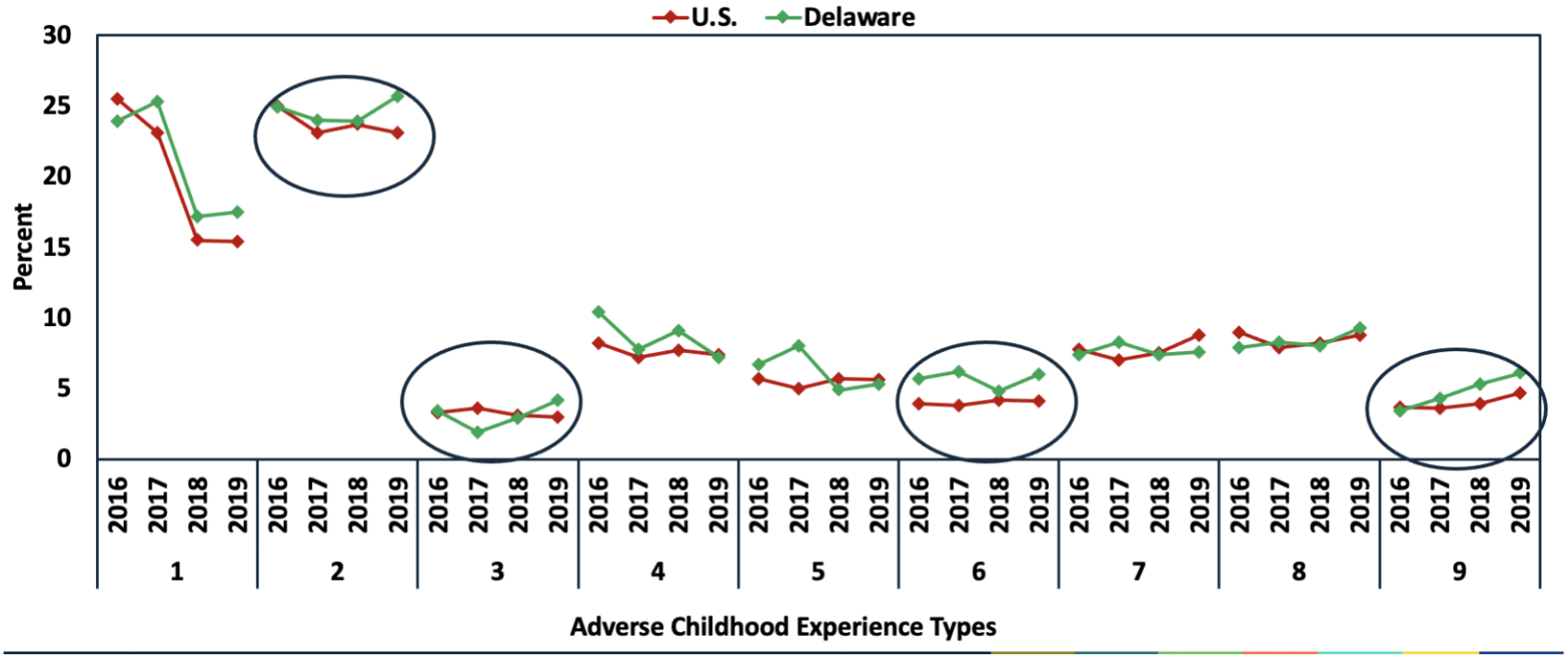


Figure 133: Adverse childhood experiences, by specific indicator, Delaware and National comparisons, ages 0-17

Note: Adverse Childhood Experiences – ACE 1: Hard to Cover Basics Like Food or Housing; ACE 2: Child Experienced - Parent or Guardian Divorced; ACE 3: Child Experienced - Parent or Guardian Died; ACE 4: Child Experienced - Parent or Guardian Time in Jail; ACE 5: Child Experienced - Adults Slap, Hit, Kick, Punch Others; ACE 6: Child Experienced - Victim of Violence; ACE 7: Child Experienced - Lived with Mentally Ill; ACE 8: Child Experienced - Lived with Person with Alcohol/Drug Problem; ACE 9: Child Experienced - Treated Unfairly Because of Race.
Source: Hussaini, K. Delaware Department of Health and Social Services, Division of Public Health, BRFSS, 2019. Adverse Childhood Experiences in Delaware, 2019. [Presentation], 2021

Back to table of figures

2016-2019 National Survey of Children's Health

Adverse Childhood Experiences (ACE) Among Children 0 to 17, Aggregated, in Delaware by Age (in percentages)

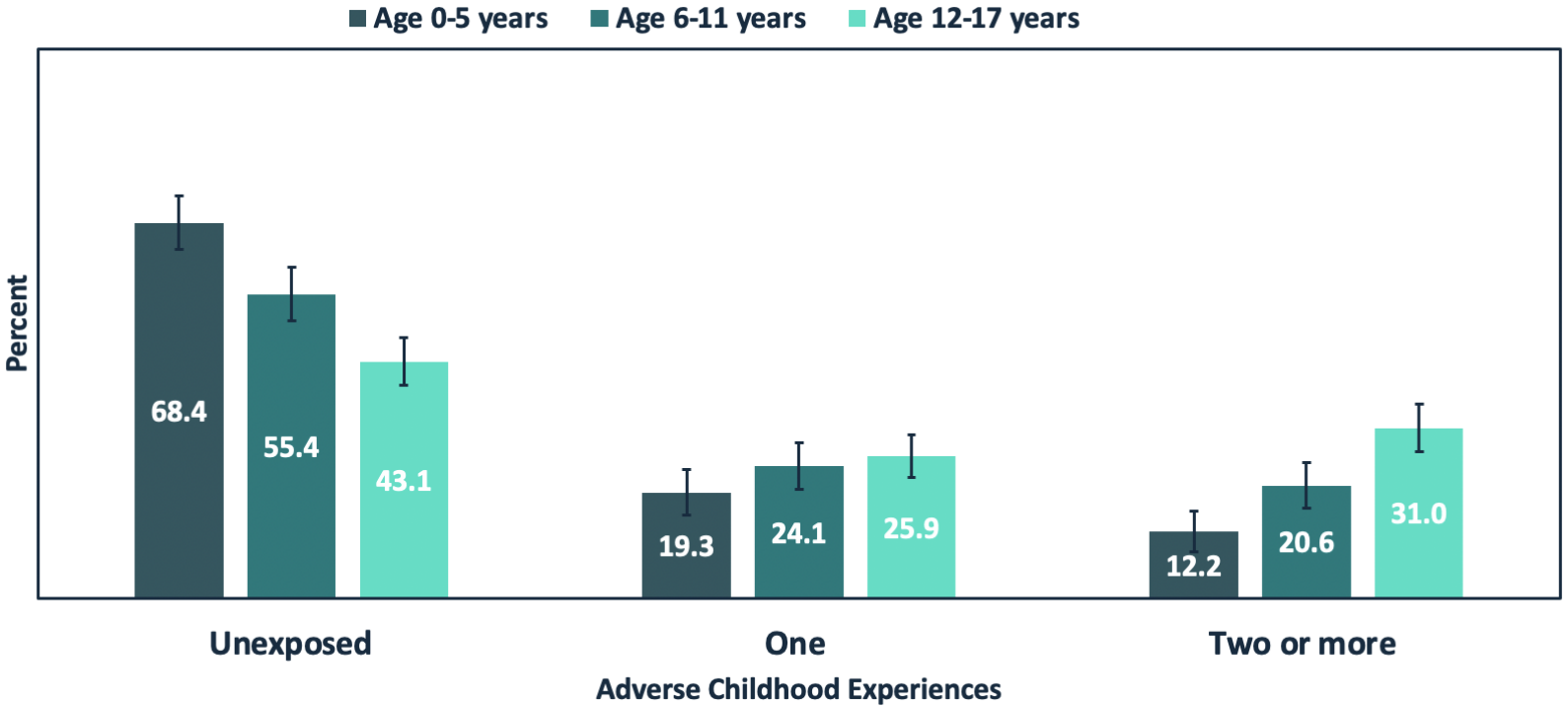


Figure 134: Adverse childhood experiences, aggregated, Delaware, ages 0-17

Note: Adverse Childhood Experiences – ACE 1: Hard to Cover Basics Like Food or Housing; ACE 2: Child Experienced - Parent or Guardian Divorced; ACE 3: Child Experienced - Parent or Guardian Died; ACE 4: Child Experienced - Parent or Guardian Time in Jail; ACE 5: Child Experienced - Adults Slap, Hit, Kick, Punch Others; ACE 6: Child Experienced - Victim of Violence; ACE 7: Child Experienced - Lived with Mentally Ill; ACE 8: Child Experienced - Lived with Person with Alcohol/Drug Problem; ACE 9: Child Experienced - Treated Unfairly Because of Race.

Source: Hussaini, K. Delaware Department of Health and Social Services, Division of Public Health, BRFSS, 2019. Adverse Childhood Experiences in Delaware, 2019. [Presentation], 2021

Back to table of figures

2016-2019 National Survey of Children's Health

Adverse Childhood Experiences (ACE) Among Children 0 to 17 in Delaware, by Race (in percentages)

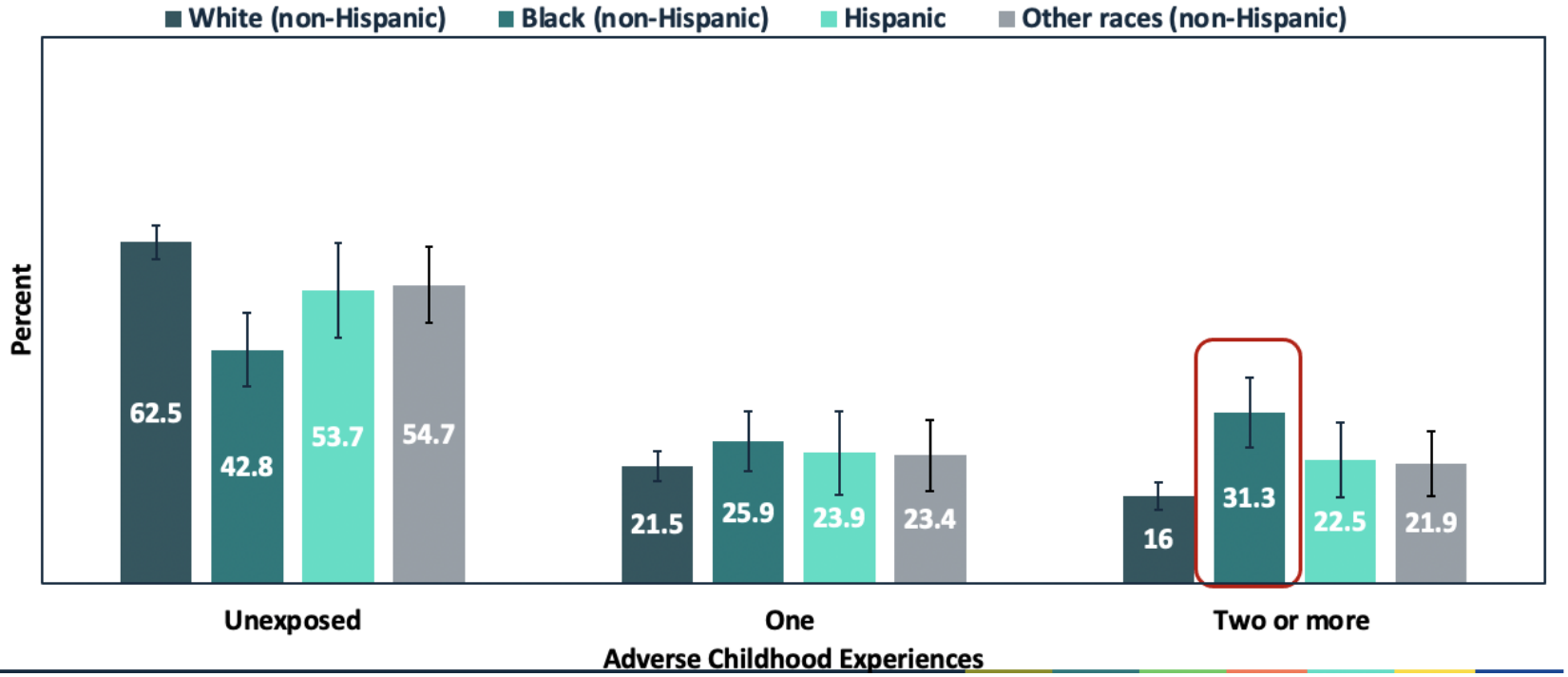


Figure 135: Adverse childhood experiences, aggregated, by race, ages 0-17

Note: Adverse Childhood Experiences – ACE 1: Hard to Cover Basics Like Food or Housing; ACE 2: Child Experienced - Parent or Guardian Divorced; ACE 3: Child Experienced - Parent or Guardian Died; ACE 4: Child Experienced - Parent or Guardian Time in Jail; ACE 5: Child Experienced - Adults Slap, Hit, Kick, Punch Others; ACE 6: Child Experienced - Victim of Violence; ACE 7: Child Experienced - Lived with Mentally Ill; ACE 8: Child Experienced - Lived with Person with Alcohol/Drug Problem; ACE 9: Child Experienced - Treated Unfairly Because of Race.
Source: Hussaini, K. Delaware Department of Health and Social Services, Division of Public Health, BRFSS, 2019. Adverse Childhood Experiences in Delaware, 2019. [Presentation], 2021

Back to table of figures

2020 Delaware School Survey
Adverse Childhood Experiences (ACEs)[a]
Among 8th Grade Students
(in percentages)

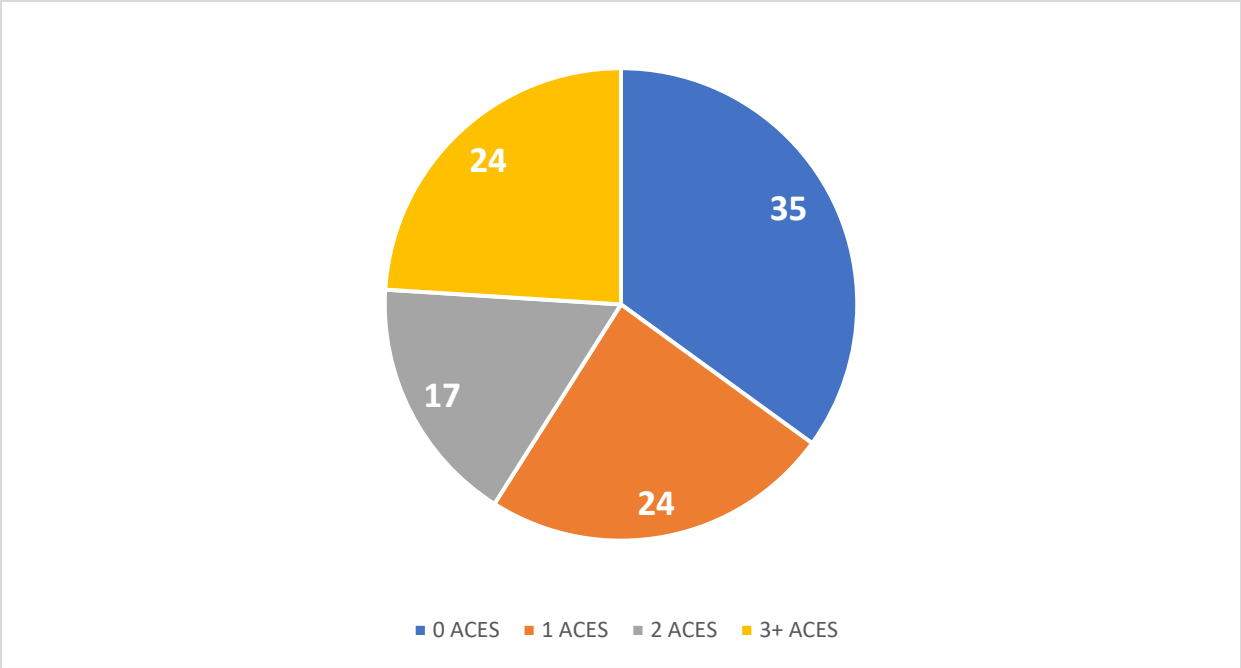


Figure 136: Adverse childhood experiences, 8th grade

Notes:
[a]Students who confirmed experiencing any of the following events: homelessness (past 30 days), incarcerated parent (past year), ever seeing/hearing violence between adults at home, ever being hit by an adult who intends to hurt you, being ever hit by another teen who intends to hurt you; ever being bullied at school or in their neighborhood, or have ever lived with a household member who was depressed, mentally ill, or attempted suicide, or lived with someone who had a problem with drinking or drugs, were placed in either the "1 ACE" or "2 ACES" or "3 or More ACEs" category depending on the number of different experiences they reported.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

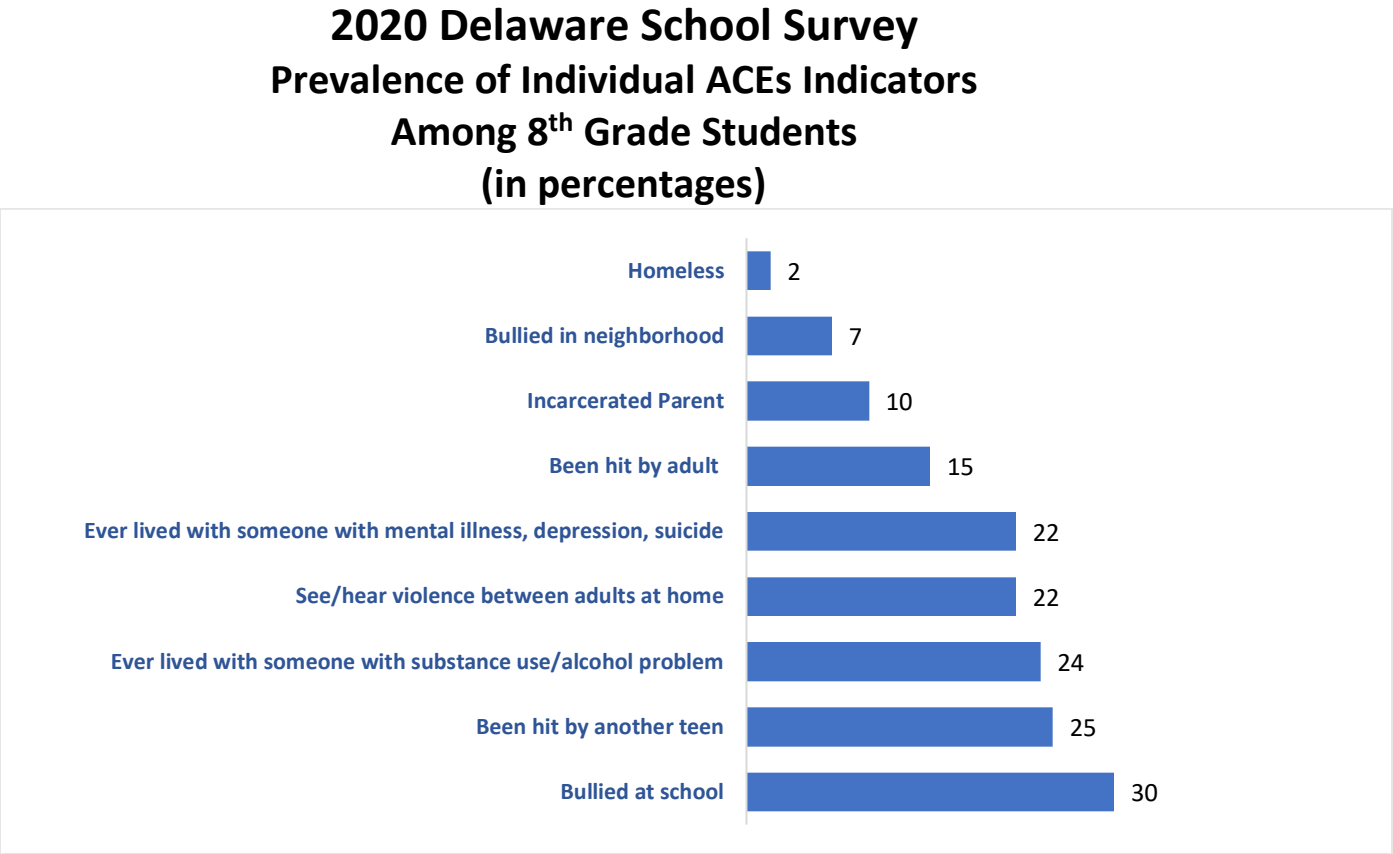


Figure 137: Individual ACEs Indicators, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Adverse Childhood Experiences by Sex
Among 8th Grade Students
(in percentages)

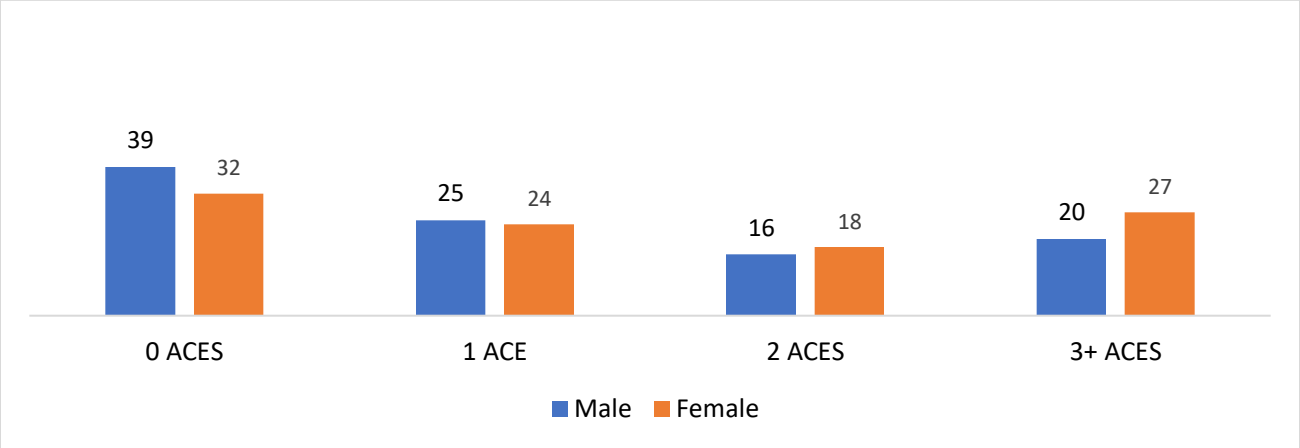


Figure 138: Adverse childhood experiences by sex, 8th grade

Adverse Childhood Experiences by Race and Ethnicity
Among 8th Grade Students
(in percentages)

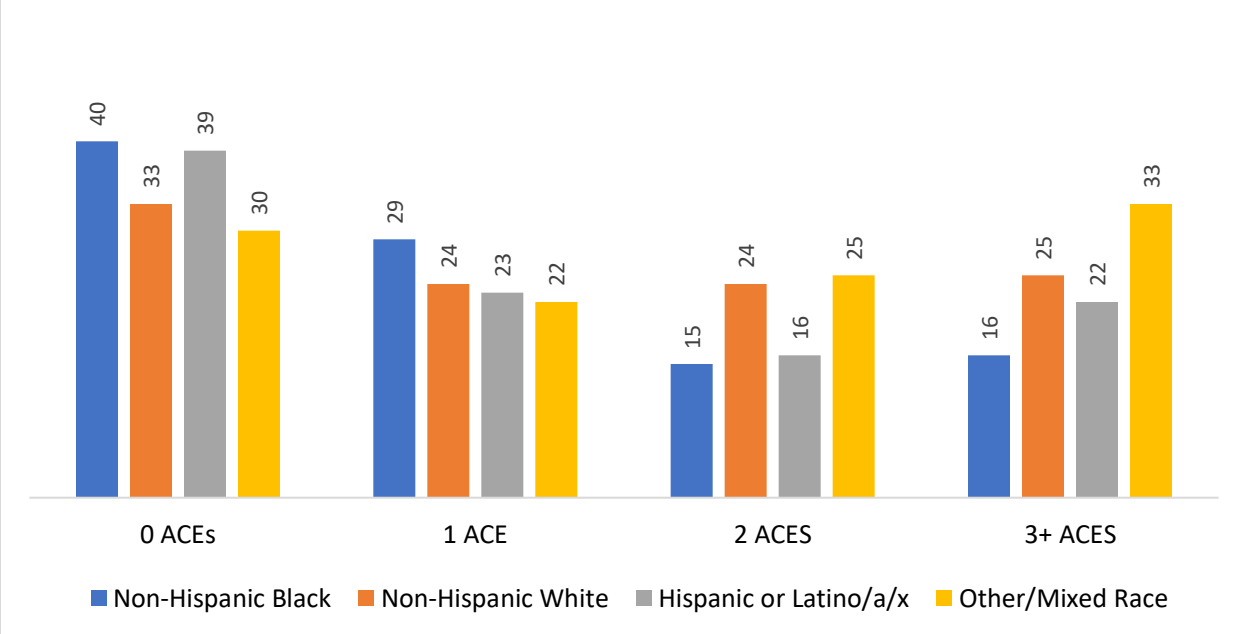


Figure 139: Adverse childhood experiences by race, 8th grade

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
ACEs[a] and Past Month Substance Use
Among 8th Students
(in percentages)

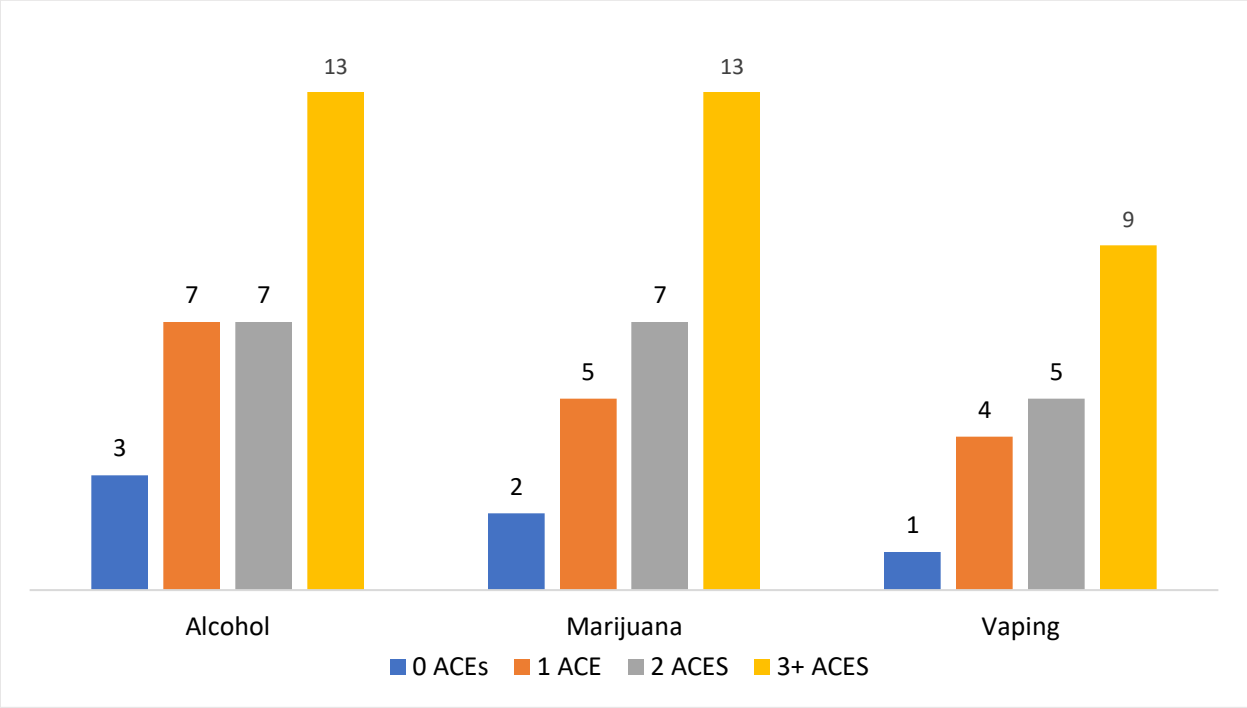


Figure 140: Adverse childhood experiences and past month substance use, 8th grade

Notes:
[a]Students who confirmed experiencing any of the following events: homelessness (past 30 days), incarcerated parent (past year), ever seeing/hearing violence between adults at home, ever being hit by an adult who intends to hurt you, being ever hit by another teen who intends to hurt you; ever being bullied at school or in their neighborhood, or have ever lived with a household member who was depressed, mentally ill, or attempted suicide, or lived with someone who had a problem with drinking or drugs, were placed in either the "1 ACE" or "2 ACES" or "3 or More ACEs" category depending on the number of different experiences they reported.
Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].
https://www.cdhs.udel.edu/seow/school-surveys/youth-risk-behavior-survey-(yrbs)

Back to table of figures

2020 Delaware School Survey
ACEs[a] and Past Year Self-Reported Mental Health Among 8th Grade Students (in percentages)

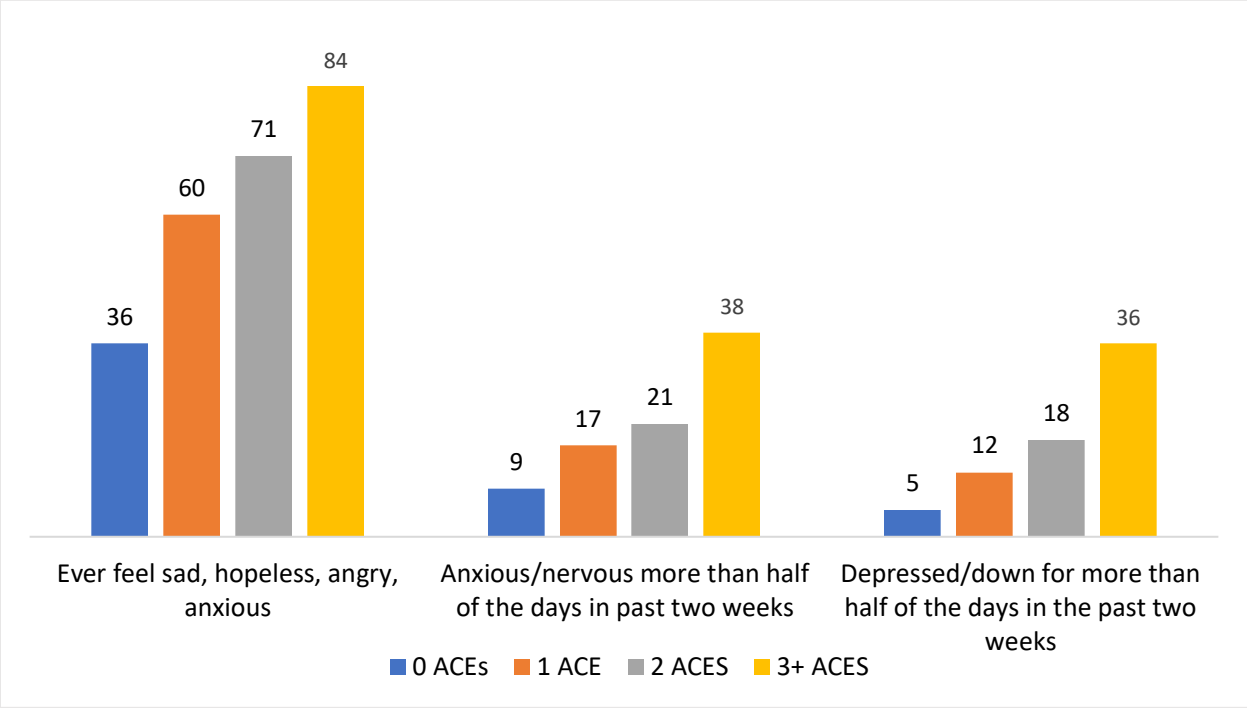


Figure 141: Adverse childhood experiences and mental health indicators, 8th grade

Notes:
[a]Students who confirmed experiencing any of the following events: homelessness (past 30 days), incarcerated parent (past year), ever seeing/hearing violence between adults at home, ever being hit by an adult who intends to hurt you, being ever hit by another teen who intends to hurt you; ever being bullied at school or in their neighborhood, or have ever lived with a household member who was depressed, mentally ill, or attempted suicide, or lived with someone who had a problem with drinking or drugs, were placed in either the "1 ACE" or "2 ACES" or "3 or More ACEs" category depending on the number of different experiences they reported.
Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

12. Gender and Sexuality

National Overview

There are a number of challenges to collecting data regarding lesbian, gay, bisexual, and transgender people (LGBT). However, most existing research provides strong evidence for the disadvantages faced by these individuals that are also associated with disproportionate risk for substance use, poor mental health, social and emotional instability, and violent victimization.

It is estimated that there are more than one million transgender[25] adults in the country (Meerwijk and Sevelius, 2017) and more than ten million lesbian, gay, or bisexual adults; altogether, the lesbian, gay, bisexual, and transgender (LGBT)[26] population constitutes roughly 4.5% of the adult U.S. population (Williams Institute, 2019). Members of the LGBTQ[27],[28] community have consistently faced discrimination, harassment, and violence at the interpersonal and at the systemic level, and it is only in recent years that significant legal rulings have begun to extend major civil rights protections to LGBTQ individuals. Same-sex marriage was legalized in the U.S. a little over five years ago (Obergefell v. Hodges, 2015); prior to this ruling, same sex couples faced barriers in accessing the same relationship privileges granted to heterosexual couples, such as eligibility for spousal benefits in health insurance and next-of-kin rights. In June 2020, the Supreme Court ruled in a series of employment discrimination cases that employers could not fire employees on the basis of their sexual orientation or gender identity (Bostock v. Clayton County, 2020), finally granting protections to LGBTQ Americans under Title VII of the Civil Rights Act of 1964.

Despite making up a substantial portion of the population and ample evidence of discriminatory practices and policies, historically, research on LGBTQ individuals has not been robust nor conducted on a nationally representative scale. There is no government mandate to include sexual orientation and gender identity as demographic categories on government collected and

[25] Someone is transgender when their gender identity is different from the sex that they were assigned at birth; the term cisgender is used to describe people whose sex at birth and gender identity are aligned.

[26] While the acronym LGBT explicitly references lesbian, gay, bisexual, and transgender identities, there are a variety of sexual orientations and gender identities that may be included within this community, such as pansexual, asexual, queer, non-binary, or people who are questioning their sexual orientation and/or gender identity.

[27] The letter "Q" has multiple meanings in this context. It is typically short for queer but can represent those individuals who do not feel fully represented by the adjectives of lesbian, gay, bisexual, or transgender, or those who are questioning or unsure how they identify in terms of sexual orientation, gender identity, or in terms of gender expression. While the LGBTQ acronym (or LGBT depending on the wording of the referenced data source) is used in this text, it is important to acknowledge that this is an imperfect and non-exhaustive identifier, and many sources may use variations of this acronym to refer to the community. The Trevor Support Center and GLSEN offer terminology resources on this topic.

[28] Gender expression refers to how an individual presents gender identity. Although this is an important topic there is very little available data, therefore it is beyond the scope of the current discussion.

federally funded data, although some individual states and provinces do collect this data (Persad, 2019). In the 2020 Census, while respondents are now able to identify whether they have a same-sex partner when answering the question about their household composition, there still are not more specific questions related to sexual orientation and gender identity (SAGE, 2020; U.S. Census Bureau, 2020). This will necessarily result in an undercount, as not all LGBTQ people are in same-sex relationships or married to their partners. The relative invisibility of LGBTQ people in these data poses serious problems when it comes to issues of resource allocation and LGBTQ inclusion in important policy and funding decisions.

Collecting data on this population is important but difficult, as sexuality and gender categories are often fluid and evolving over the life course, while typical demographic measures are fixed (Ruberg and Ruelos, 2020). The Human Rights Commission (HRC) in 2019 issued a report advocating for more expansive data collection on this population and provided some guidelines for best practices in how to construct survey questions on the topics of gender and sexuality. Some of these guidelines included: frame questions so that sexual orientation and gender identity are self-identified; use open-ended response categories in survey questions; allow for self-administration of survey questions pertaining to sexuality and gender; and assure respondents' confidentiality or anonymity so they feel safe in disclosing their identities (Persad, 2019). In their inaugural survey, the Trevor Project reported collecting responses from more than 100 different sexual orientations and gender identities among youth and young adults ages 13-24 (Trevor Project, 2019), further underscoring the vast diversity of the LGBTQ community and the challenge of accurately representing all identities within data collection efforts.

Most existing research provides strong evidence for the disadvantages faced by members of the LGBTQ community that is also associated with disproportionate risk for substance use, poor mental health, social and emotional instability, and violent victimization. Data from the 2019 National Survey on Drug Use and Health shows that more than a third (35.6%) of lesbian, gay, and bisexual (LGB) adults aged 18-25 report using marijuana in the past month (SAMHSA, 2020). There have also been significant increases in past month and daily marijuana use among LGB adults 26 and older. In 2019, approximately 18.3% of LGB adults age 18 or older met the criteria for a substance use disorder, and 12.9% met the criteria for both a substance use disorder and a mental illness (SAMHSA 2020). Sexual minorities also experience sexual assault and relationship violence at higher rates than heterosexual people; results from the National Intimate Partner and Sexual Violence Survey (NISVS) indicate that 47% of bisexual women have been raped in their lifetime, compared with approximately 17% of heterosexual women (Walters, Chen, and Breiding, 2013). It is important to note that differences in these rates are not intrinsically associated with being LGBTQ but rather relate to the adversities that these individuals frequently face concerning their sexual orientation or gender identity.

Young people are especially vulnerable, as rejection and lack of acceptance from family members can create unsafe home environments and contribute to a higher rate of

homelessness among these youth (Cho, Wilson, Shelton, and Gates, 2015). Lesbian, gay, bisexual and questioning youth are at higher risk of using substances (Marshal et al., 2008) and experience greater rates of depression and suicidal ideation (Burton et al., 2013; Marshall et al., 2011) when compared to their heterosexual peers. Data from the National Youth Risk Behavior Survey (YRBS) in 2019 found that lesbian, gay, and bisexual high school students report significantly higher rates of past month alcohol, marijuana, and cigarette use than their heterosexual peers. LGB students also attempted suicide in the past year at more than three times the rate of heterosexual students.

LGBTQ youth have faced particular challenges during the COVID-19 pandemic. The Trevor Project's latest national survey collected data in late 2020 on more than 34,000 LGBTQ youth ages 13-24 (Trevor Project, 2021). More than half of LGBTQ youth reported that they had experienced discrimination based on their gender or sexual orientation in the past year, and only one in three LGBTQ youth found their home to be LGBTQ-affirming. Nearly a quarter (24%) of trans and non-binary youth reported attempting suicide in the past year when none of the people they lived with respected their pronouns, and nearly half of LGBTQ youth reported that the pandemic negatively impacted their ability to express their sexual orientation (Trevor Project, 2021).

Delaware Context

The Delaware High School Youth Risk Behavior Survey (YRBS) includes a question about sexual orientation: *Which of the following best describes you?* Students are provided four response choices: *heterosexual (straight)*; *gay or lesbian*; *bisexual*; or *not sure*. In 2017, an additional question was added regarding transgender status: *Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?* Four response choices are provided*: no, I am not transgender*; *yes, I am transgender; I am not sure if I am transgender; I do not know what this question is asking.*

During administration of the 2019 Delaware High School YRBS, low school participation throughout the state meant that the criteria for a representative sample was not met. As such, Delaware data reported in this chapter comes from the 2017 Delaware High School YRBS. Eleven percent of Delaware high school youth who responded to the 2017 YRBS identified as lesbian, gay, or bisexual (LGB), and an additional 3% indicated that they were unsure of their sexual orientation. Among students who responded to the transgender question, approximately 1.2% identified themselves as transgender and another 1.2% were unsure of their gender identity (Center for Drug and Health Studies, 2018). Due to the small sample size of transgender youth surveyed in Delaware, further analysis of their substance use, mental health, and other risk and protective factors was not possible in this year; we were, however, able to report on these indicators for LGB students.

LGB students in Delaware reported significantly higher rates of past month marijuana and cigarette use than heterosexual students. Similar to national data, in 2017, Delaware LGB students reported attempting suicide at more than three times the rate of heterosexual students. More than half (56%) reported symptoms of depression within the previous year. There is also evidence that LGB students have a higher prevalence of adverse experiences that may put them at risk for poorer mental health and substance use problems. For example, LGB students report being bullied at school in the past year at more than twice the frequency of heterosexual students. More effective and consistent data collection on these issues can help policy makers, educators, and practitioners understand how to better support LGBTQ students and mitigate the experiences that put them at greater risk for adverse outcomes. The new SEOW infographic, LGBTQ+ Affirming Spaces, provides information and resources to support LGBTQ youth (Center for Drug and Health Studies, 2021).

2019 National Youth Risk Behavior Survey
Past Month Substance Use Among LGB High School Students (in percentages)

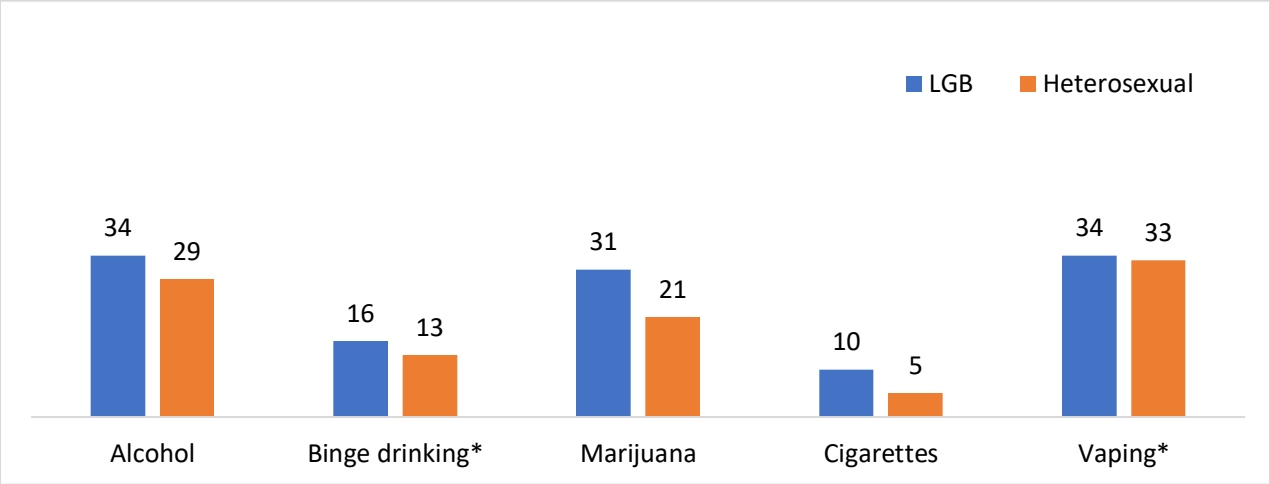


Figure 142: Past month substance use among LGB students, HS, National YRBS

Past Year Mental Health Among LGB High School Students (in percentages)

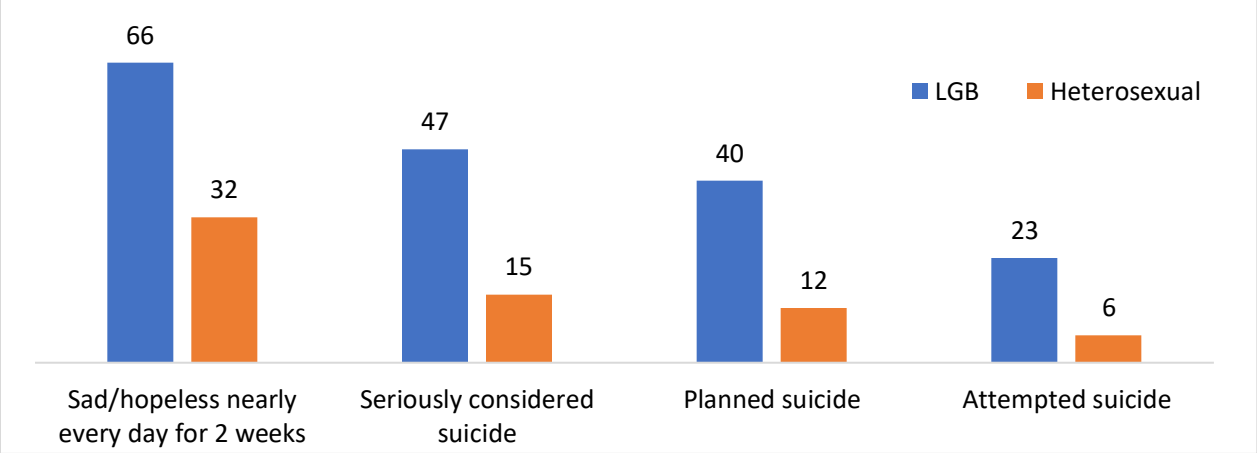


Figure 143: Past year mental health among LGB students, HS, National

Note: "Binge drinking" is defined as five or more drinks of alcohol in a row for males/four or more drinks for females.
*The relationships between binge drinking, vaping and LGB status were not statistically significant.

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

2019 National Youth Risk Behavior Survey
Experiences of Dating Violence
Among LGB High School Students
(in percentages)

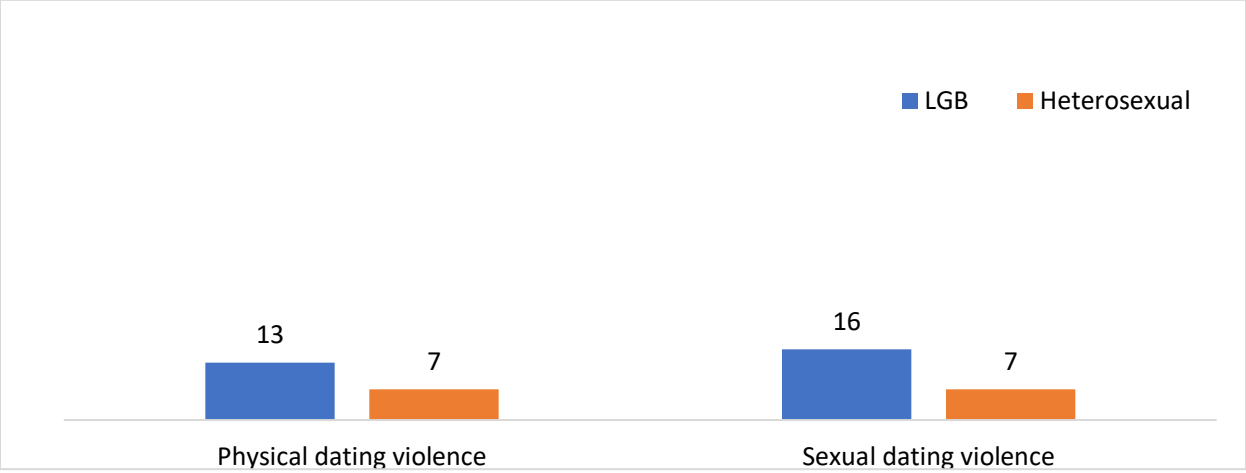


Figure 144: Experiences of dating violence among LGB students, HS, National

Bullying and School Safety
Among LGBTQ High School Students
(in percentages)

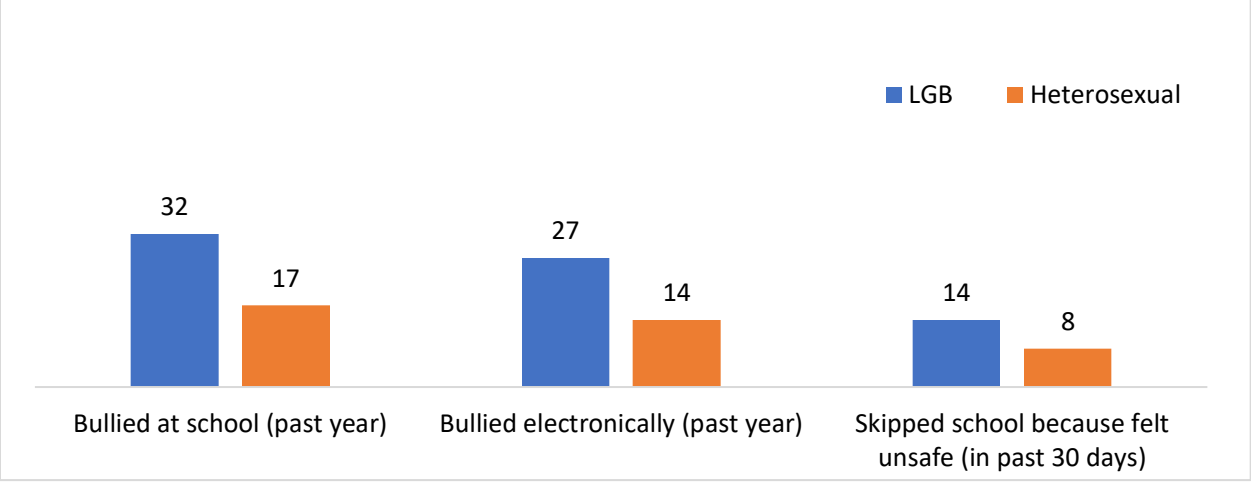


Figure 145: Bullying and school safety among LGB students, HS, National

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

2017 Delaware Youth Risk Behavior Survey
Past Month Substance Use Among LGB High School Students (in percentages)

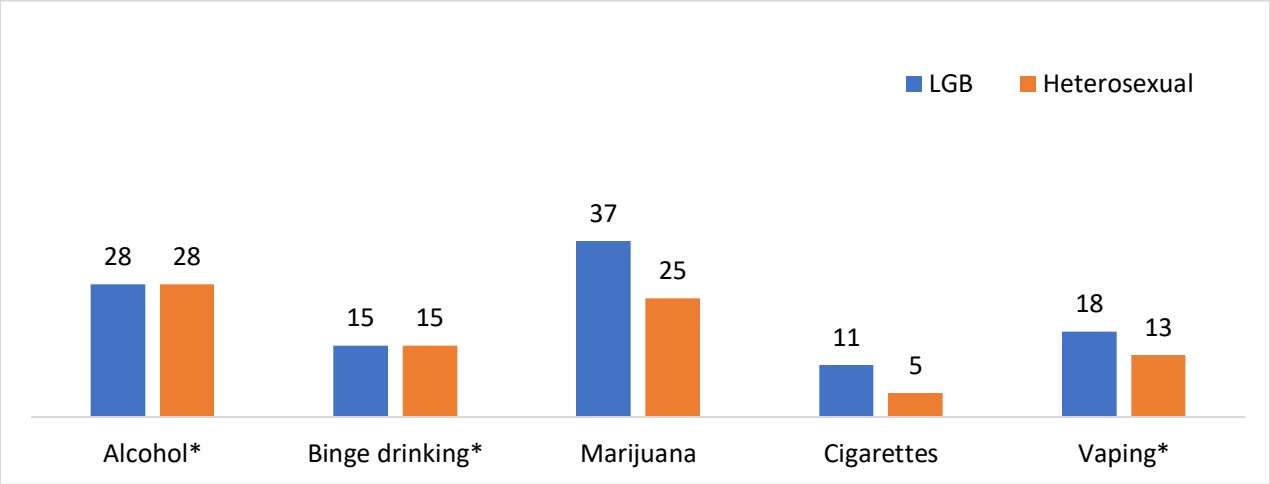


Figure 146: Past month substance use among LGB students, HS, Delaware

Past Year Mental Health Among LGB High School Students (in percentages)

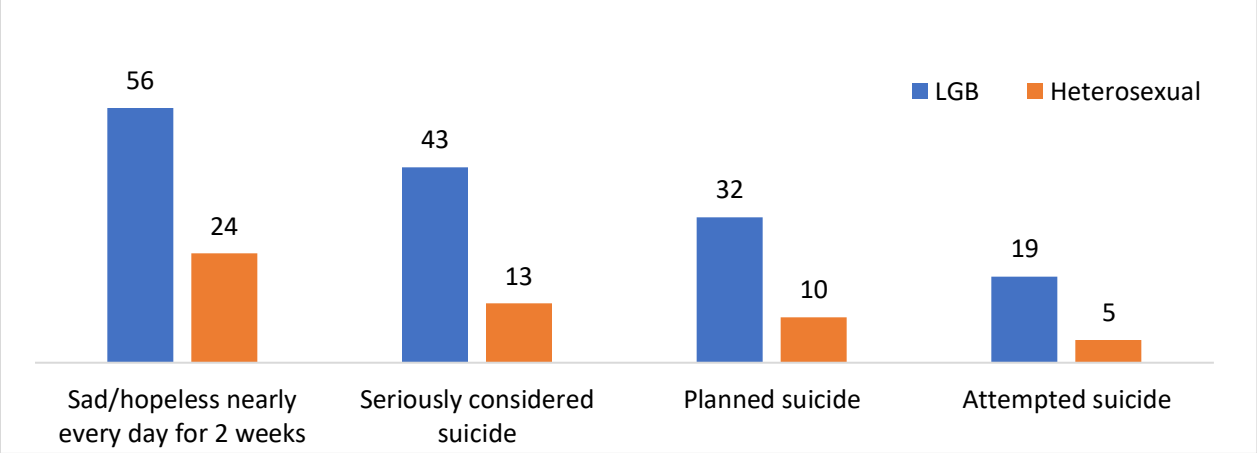


Figure 147: Past year mental health among LGB students, HS, Delaware

Note: "Binge drinking" is defined as five or more drinks of alcohol in a row for males/four or more drinks for females.
*The relationships between alcohol, binge drinking, vaping and LGB status were not statistically significant.

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

2017 Delaware Youth Risk Behavior Survey
Experiences of Dating Violence Among LGB High School Students (in percentages)

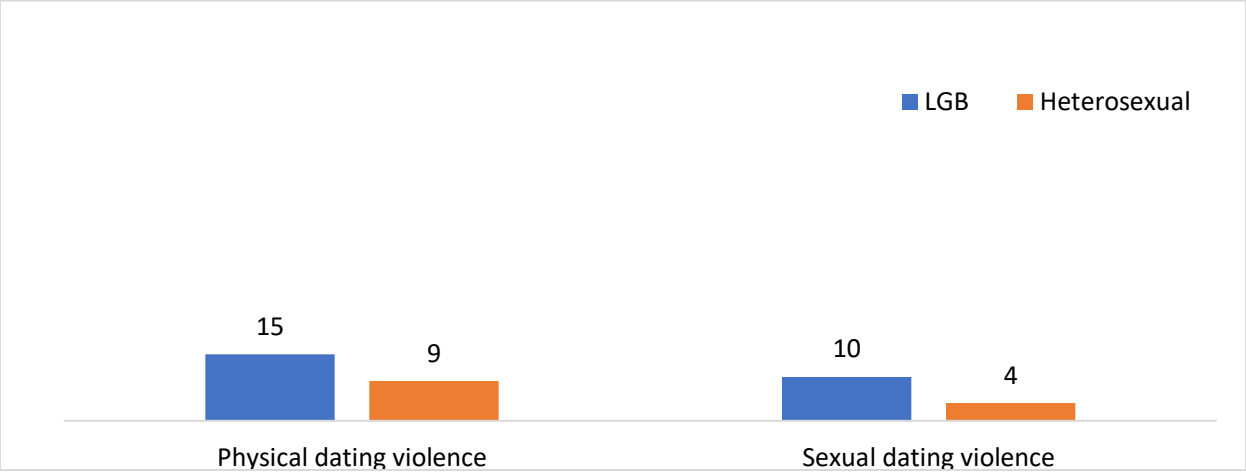


Figure 148: Experiences of dating violence among LGB students, HS, Delaware

Bullying and School Safety Among LGBTQ High School Students (in percentages)

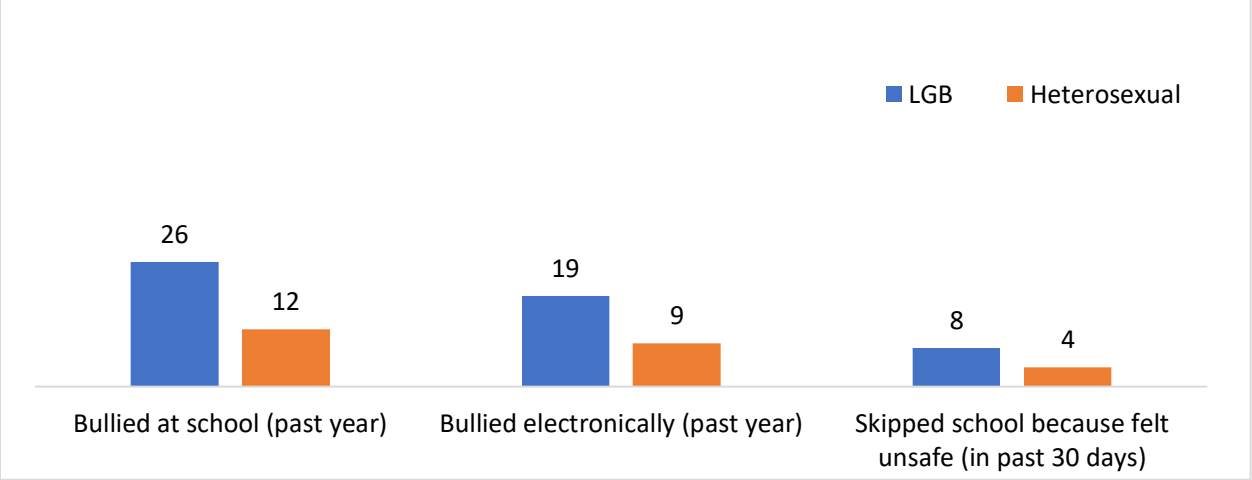


Figure 149: Bullying and school safety among LGB students, HS, Delaware

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data.

Back to table of figures

13. Protective Factors

National Overview

Protective factors help to prevent and mitigate the impact of trauma, substance use, or other behavioral health concerns. Protective factors may occur at individual, family, peer, community, and societal levels.

Delaware 8th graders who report that they get along well with and can talk to their parents are less likely to report substance use and symptoms of anxiety and depression. The same is true for students who report they feel safe in their neighborhoods and care about doing well at school.

Four out of five Delaware parents report that their child lives in a home where families demonstrate qualities of resilience during difficult times.

Whether the focus is mental health, trauma, substance use, violence, or other behavioral health issues, prevention work is grounded in evidence-based strategies designed to reduce risk factors and strengthen protective factors. Specific risk and protective factors are relevant at various stages of life and across several domains for intervention (Cleveland et al., 2008; Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.). Individual level protective factors include personal characteristics such as adaptability, empathy, and good social skills, as well as a value on academic achievement, hope for the future, self-efficacy, and a willingness to follow rules. Family level protective factors include having safe, stable, and nurturing home environments with clear and consistent rules. Community level factors include social organization, norms, and community safety. Schools operate at the intersection of the peer and community level—they are the setting for most peer interactions among youth but can also provide a powerful protective function if school leaders find ways to enhance school connectedness and promote healthy norms (Centers for Disease Control and Prevention [CDC], 2009). Schools can promote school connectedness by providing adult support, supporting the formation of positive peer groups, promoting the importance of education, and creating a safe and positive school environment. In summary, support and a caring environment coupled with clear and consistent limits are important factors associated with healthy youth development. Further, the feeling of connectedness through positive family, peer, and social relationships builds resilience in youth. Healthy relationships and social supports promote mental wellness and life skill development.

At different stages in a person's life, one domain may have a more significant influence in comparison to another. For example, Cleveland et al. (2008) found that peers and the school environment had a greater influence on older adolescents' substance use rates compared to those of younger adolescents. In contrast, families and the outside community had a greater impact than peers or school environments on younger children. Effective prevention

programming should target risk and protective factors that are most salient at each life stage and best-suited for the domain in which the intervention will be implemented (National Institute on Drug Abuse [NIDS], 2003). Early interventions, even at the preschool level, can play a powerful role in reducing risk throughout the "developmental risk trajectory" (NIDA, 2003). The Substance Abuse and Mental Health Services Administration notes that risk factors are "correlated and cumulative"—that is, having a risk factor early in life increases the likelihood of having more risk factors later in life (SAMHSA, n.d.). Efforts to reduce risk factors and increase protective factors for one area of concern, such as substance use, have the potential to improve other areas of concern, such as mental health (SAMHSA, n.d.).

Delaware Overview

The 2018-2019 National Survey of Children's Health (NSCH) provides national and state prevalence rates of many aspects of childhood health and wellbeing, including several key protective factors, as reported by their parents. Respondents are asked a number of questions regarding their child's home life and family supports. In terms of family protective factors, more than half of Delaware parents reported having attended an event or activity of their child within the past year. Two-thirds of parents reported that the family ate together at least four days a week, and more than half of parents of younger children reported that someone in the family read to them at least four days a week. Delaware parents also reported children had high levels of school engagement; approximately half reported that their child was always engaged and another third reported that their child was usually engaged. More than three out of four respondents reported their children aged 6 to 17 had no difficulty making and keeping friends (NSCH, n.d.).

The NSCH also includes a series of four questions that comprise a Family Resilience Composite Measure. The questions ask parent respondents to report if their child lives in a home where family members: *talk together about what to do; work together to solve problems; know that they have strengths to draw upon; and stay hopeful even in difficult times*. Eighty-two percent of Delaware respondents reported that their child lived in a home with these four supports in place most or all of the time, similar to the national sample.

Results from the 2020 Delaware School Survey (DSS) highlight associations between several protective factors and rates of substance use as well as mental health indicators among 8th grade students.[29] Overall, 95% of students reported having at least one person as a source of support and encouragement, most commonly a parent or guardian, followed by friends and then teachers. Students who reported higher grades reported lower rates of vaping, alcohol,

[29] It is important to note that while there is a statistical association between these factors, this does not necessarily mean that there is a causal relationship between these variables in every instance, and there may be additional unobserved indicators that also influence the outcome. This holds true for all of the associations discussed in this chapter.

and marijuana use, and those who cared about doing well in school reported lower substance use rates as well as lower rates of anxiety and depression. The most notable associations were among students who reported getting along with their parents; students who reported never or not often getting along with their parents were approximately three times as likely to have used alcohol, marijuana, and vaped within the past year. These students were also three times as likely to report experiencing anxiety and more than four and a half times as likely to report symptoms of depression on more than half of the days in the past two weeks. Feeling safe in the neighborhood and at school were also associated with lower rates of anxiety and depression, and feeling safe in the neighborhood was also associated with lower rates of substance use. However, there was not a clear association between having strictly enforced rules at home and either substance use or mental health indicators.

Finally, hopefulness has been identified as a protective factor for mental health (Kirby et al., 2021). As discussed in Chapter 9 of this report, several questions on the DSS are based on the Cantril Ladder, which asks the following: *Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.* Two-thirds of 8th graders rated themselves in the top tier of the ladder at the time of the survey and three-quarters envisioned themselves being in the top tier in five years (please see Chapter 9 Mental Health and Wellbeing).[30] This suggests that the majority of students are hopeful about where they will be in life in the future.

The following figures highlight a number of protective factors among Delaware youth and associations with risk experiences.

[30]The Delaware School Survey includes two questions based on the Cantril Ladder. Students are asked to imagine a ladder with steps numbered from zero at the bottom and ten at the top. The top of the ladder represents the best possible life for the student, and the bottom of the ladder represents the worst possible life. Students are asked to respond with which step of the ladder they feel that they personally stand on now, and on which step of the ladder they think they will stand on in five years. Present and Future scales vary slightly. The Present scale categorizes steps 7-10 as *Thriving* and steps 5-6 as *Struggling*. The Future scale categorizes steps 8-10 as *Thriving* and 5-7 as *Struggling*. Both scales categorize steps 0-4 as *Suffering*.

2018-2019 National Survey of Children's Health
Family Resilience Composite Measure
(in percentages)

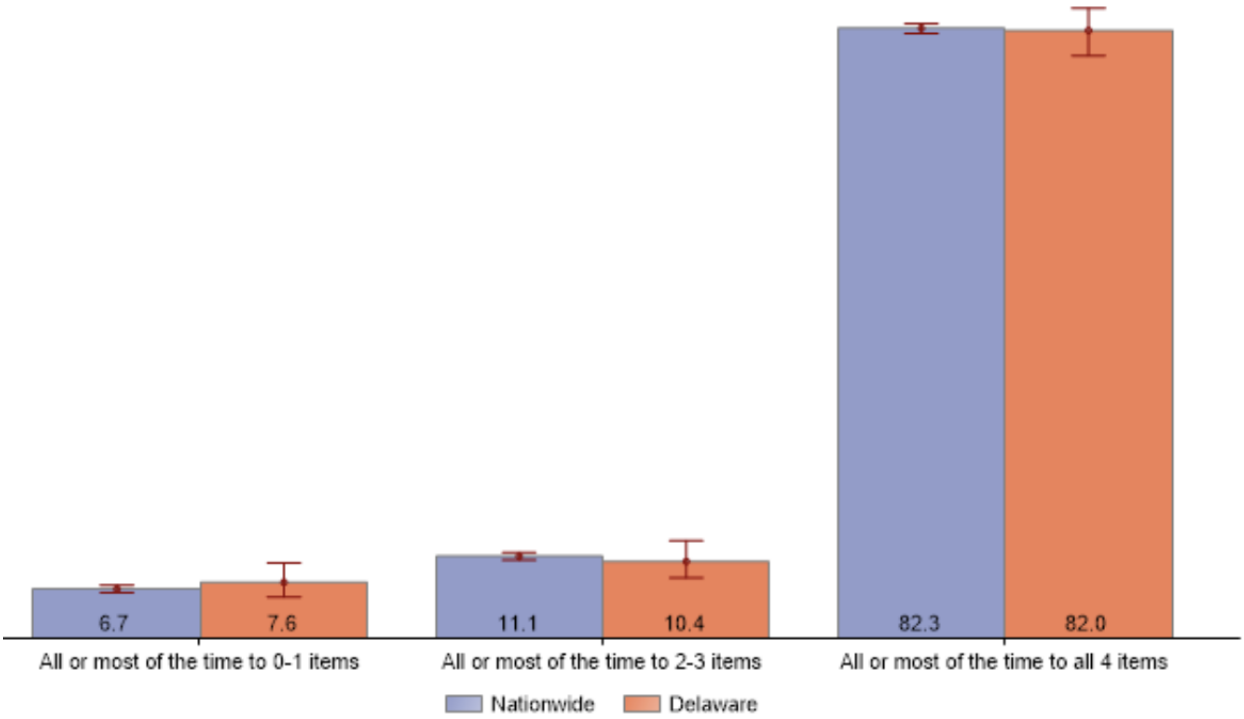


Figure 150 Family Resilience Composite Index, Delaware and national comparison, children 0-17

Note:
Indicator 6.12 Family Resilience: "Does this child live in a home where the family demonstrates qualities of resilience during difficult times." The composite measure includes four items: "Talk together about what to do; Work together to solve the problem; Know we have strengths to draw upon; Stay hopeful even in difficult times."
Source: National Survey of Children's Health, Health Resources and Services Administration, Maternal and Child Health Bureau.
Source: Data Resource for Child and Adolescent Health.

Back to table of figures

2018-2019 National Survey of Children's Health
Number of Days Family Ate Together During Past Week
(in percentages)

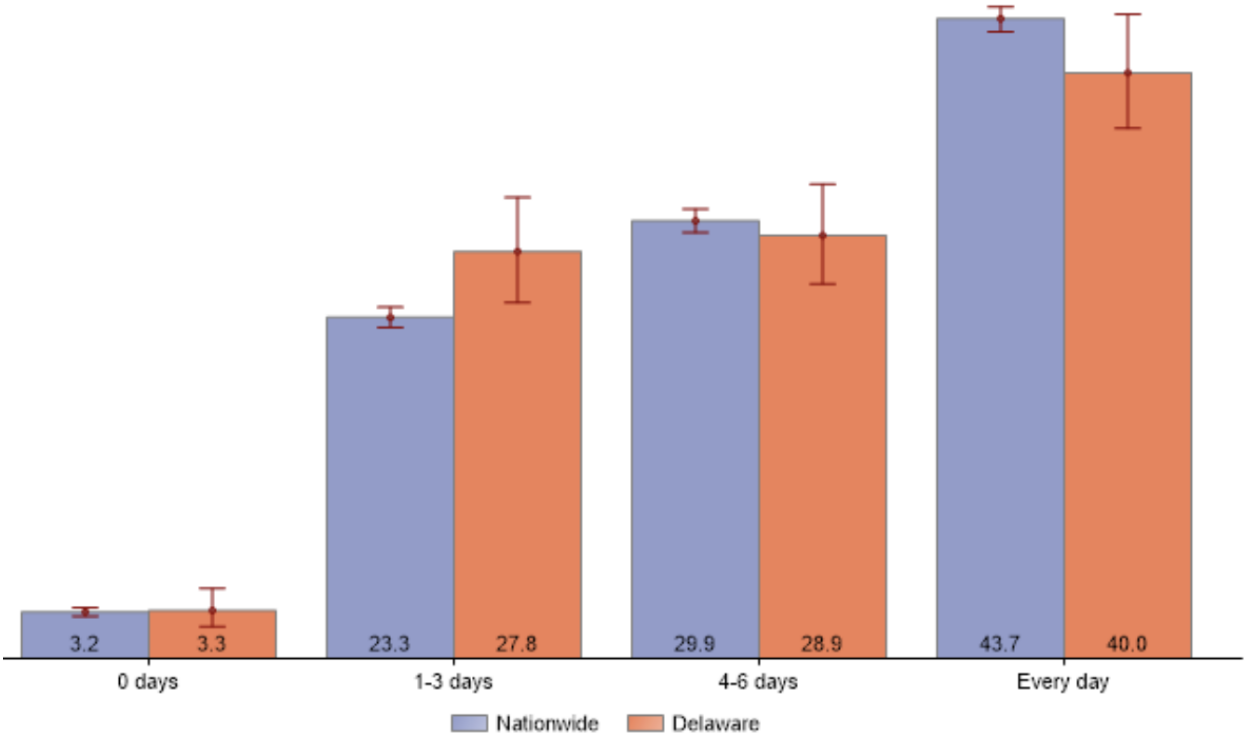


Figure 151: Number of days children and family ate together during the past week, Delaware and National comparison, ages 0-17

Note:
Indicator 6.9: "During the past week, on how many days did all the family members who live in the household eat a meal together?"
Source: Data Resource for Child and Adolescent Health.

Back to table of figures

2018-2019 National Survey of Children's Health

Number of Days Children are Read Aloud To During Past Week (in percentages)

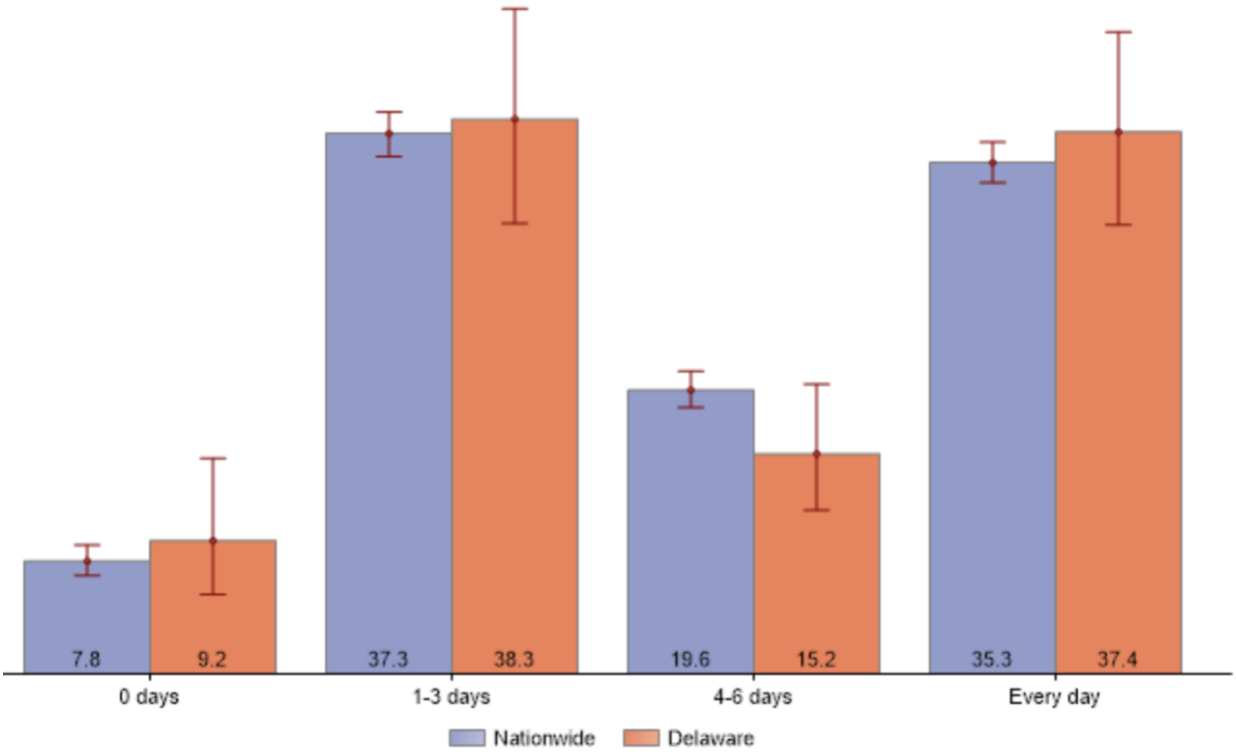


Figure 152: Number of days children were read to by household member, Delaware and National comparison, ages 0-5

Note:
Indicator 6.7: "During the past week, how many days did you or other family members read to this child, age 0-5 years."
Source: Data Resource for Child and Adolescent Health.

Back to table of figures

2020 Delaware School Survey
Sources of Support and Encouragement
Among 8th Grade Students
(in percentages)

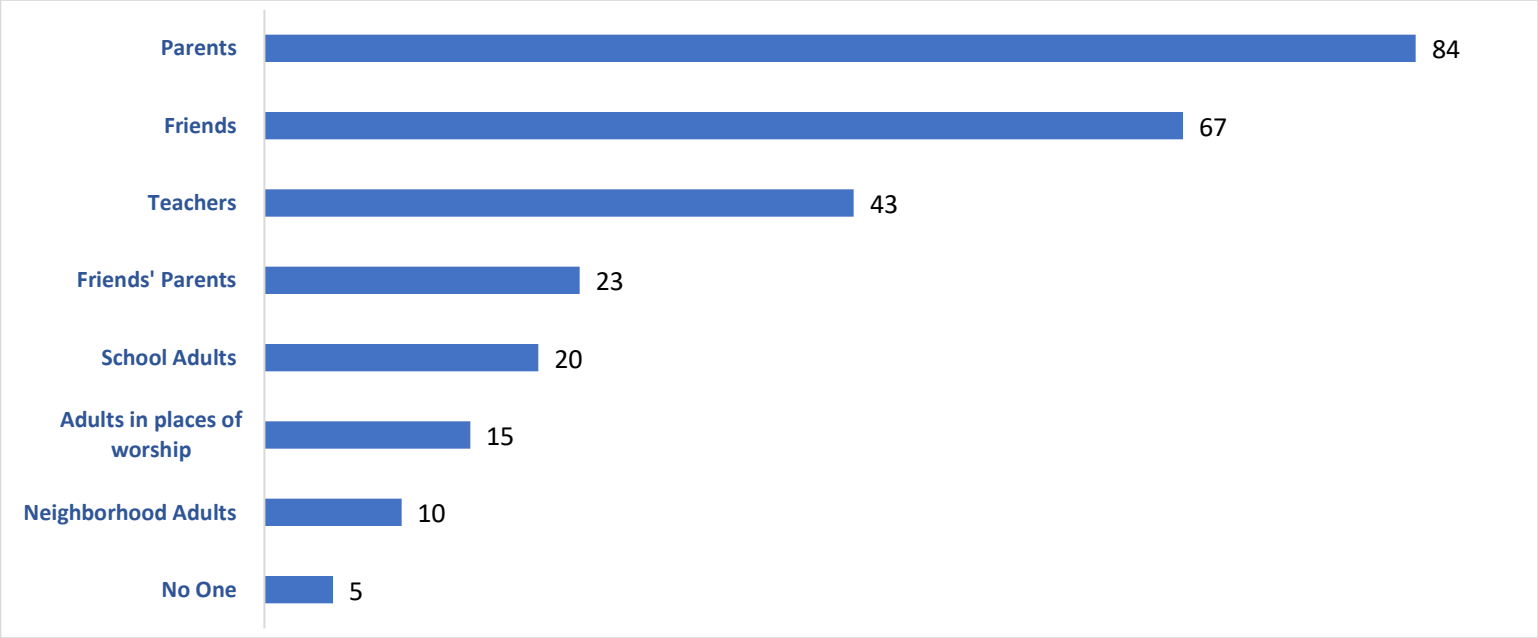


Figure 153: Sources of support and encouragement, 8th grade

Note:
Student are asked to mark all responses that apply to the question: "Which of the following people would you say give you a lot of support and encouragement?

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey

Past Year Substance Use[a] and Academic Achievement for 8th Grade Students (in percentages)

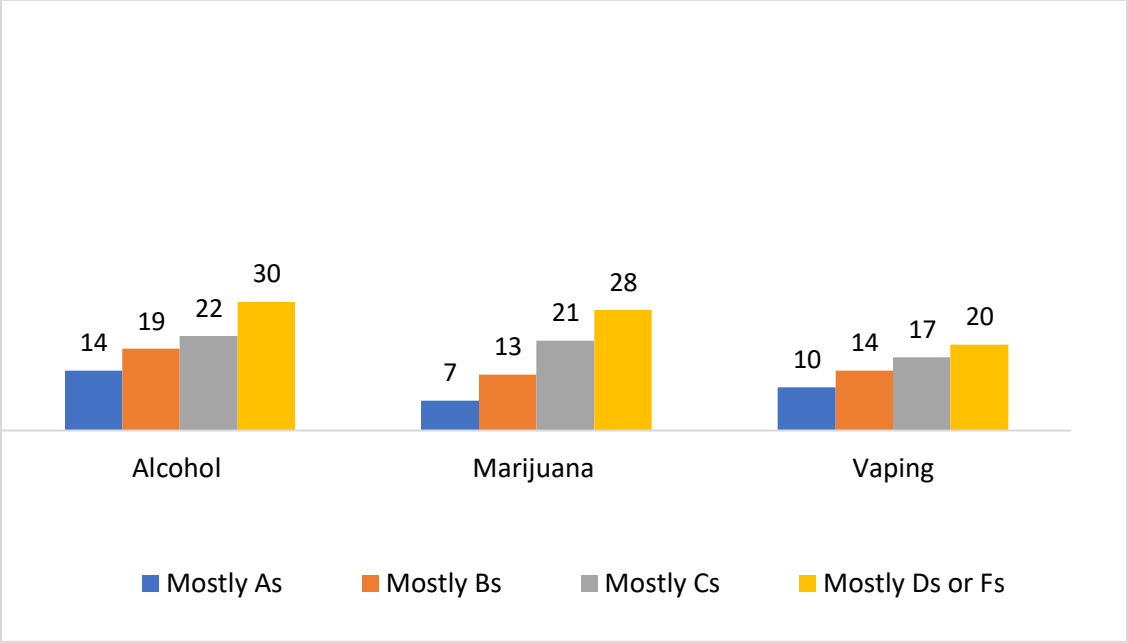


Figure 154: Past month substance use and grades, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey

Past Year Substance Use[a] and Caring about Doing Well in School for 8th Grade Students (in percentages)

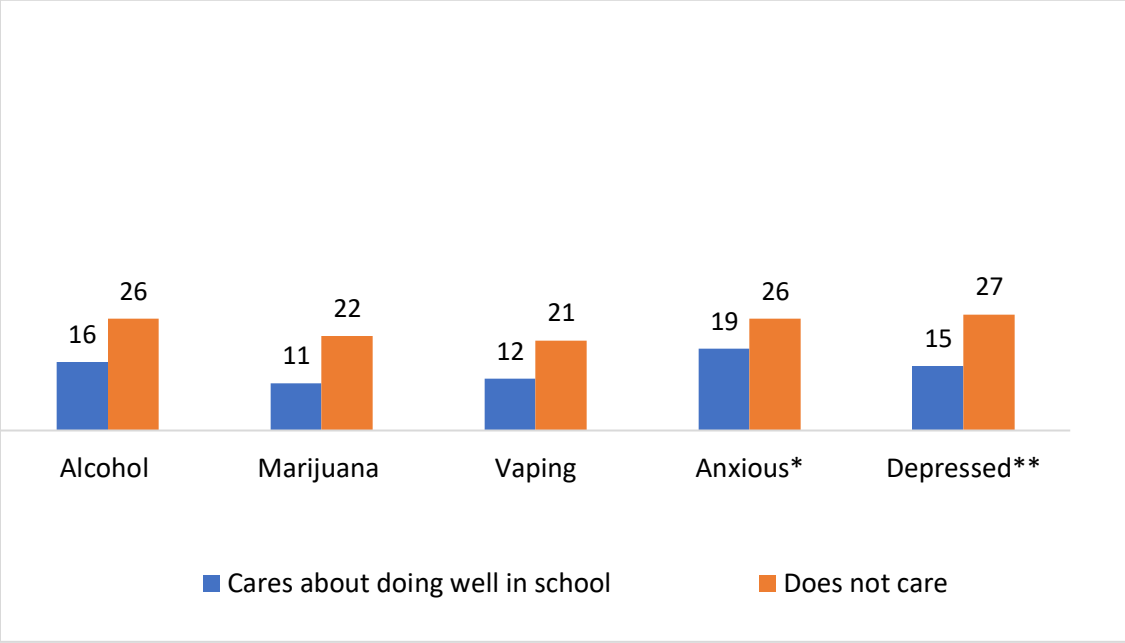


Figure 155: Substance use, mental health, and caring about school, 8th grade

Note:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
*Anxious here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.
**Depressed here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Rules Enforced at Home[a] and
Past Year Substance Use Among Delaware 8th Grade Students
(in percentages)

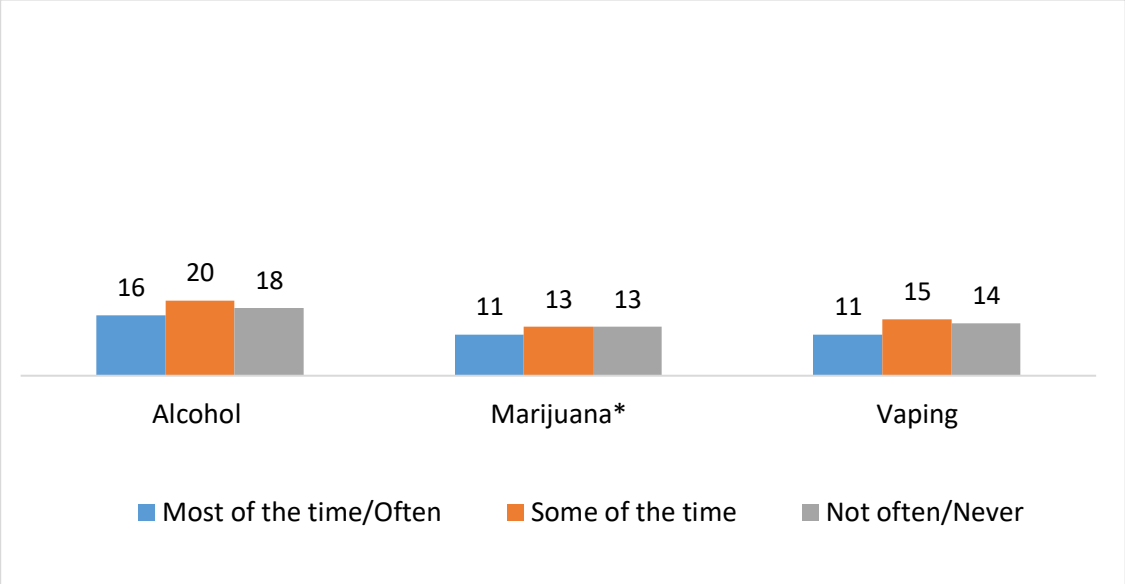


Figure 156: Past year substance use and rules enforced at home, 8th grade

Notes:
*The relationship between past year marijuana use and frequency of rule enforcement at home was not statistically significant.
[a]Students were asked: "How often are your parents' or guardians' rules strictly enforced?"

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Rules Enforced at Home[a] and Mental Health[b] Among Delaware 8th Grade Students (in percentages)

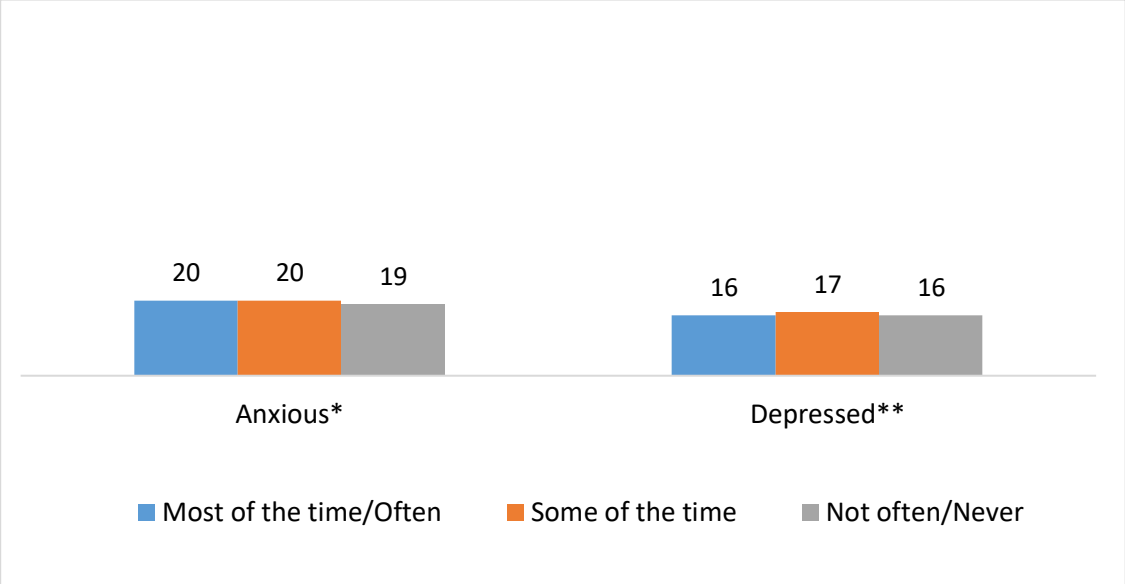


Figure 157: Mental health and rules enforced at home, 8th grade

Notes:
[a]Students were asked: "How often are your parents' or guardians' rules strictly enforced?"
[b]The relationship between rule enforcement at home and these two mental health indicators was not statistically significant.
*Anxious here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.
**Depressed here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Getting Along with Parents[a] and
Past Year Substance Use Among Delaware 8th Grade Students
(in percentages)

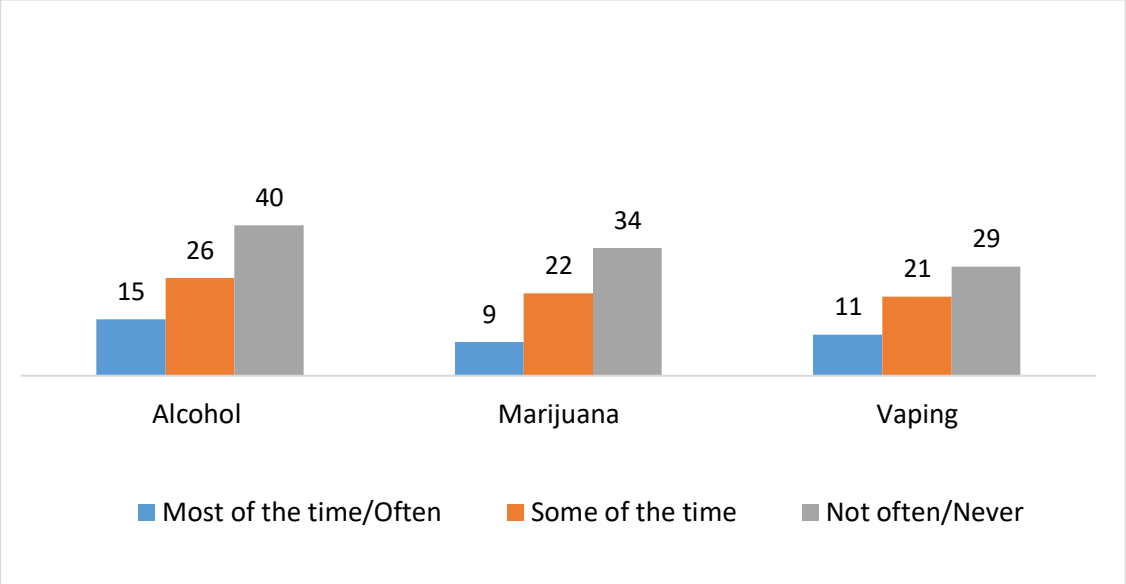


Figure 158: Past year substance use and getting along with parents, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked: "How often do you get along with your parents or guardians?"
Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Getting Along with Parents[a] and Mental Health Among Delaware 8th Grade Students (in percentages)

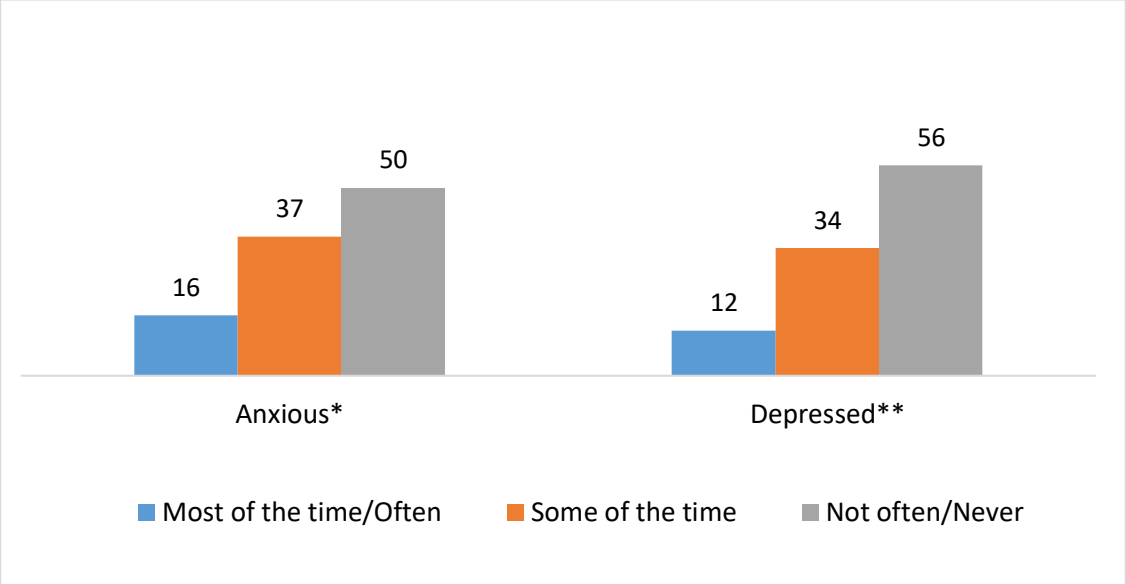


Figure 159: Mental health and getting along with parents, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked: "How often do you get along with your parents or guardians?"
*Anxious here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.
**Depressed here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Talking to Parents about School[a] and
Past Year Substance Use Among Delaware 8th Grade Students
(in percentages)

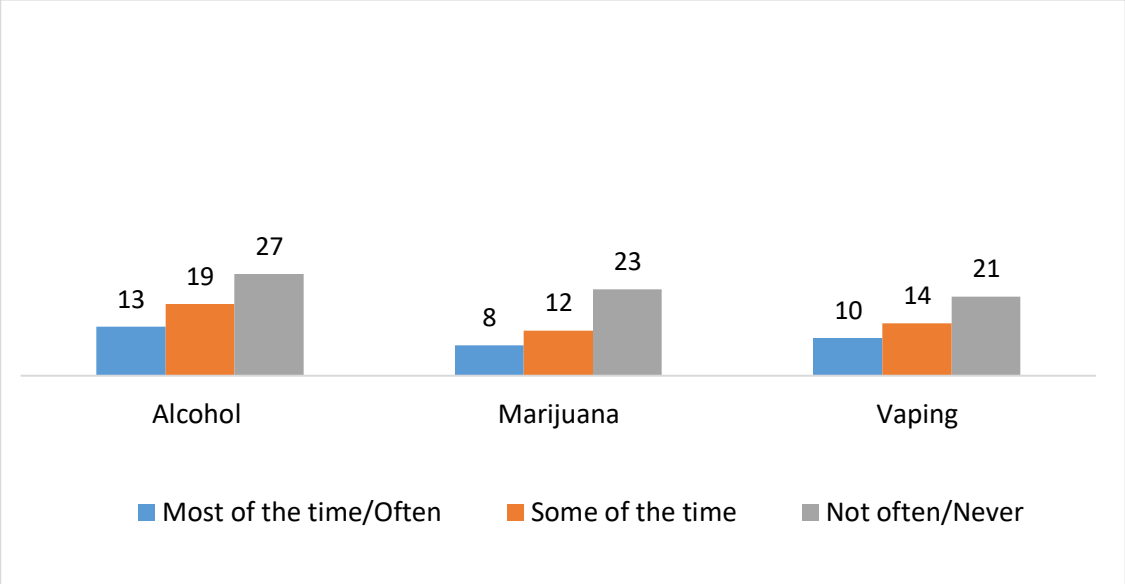


Figure 160: Past year substance use and talking to parents about school, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked: "How often do you talk with your parent or guardian about how things are going in school?"

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Talking to Parents about School[a] and Mental Health Among Delaware 8th Grade Students (in percentages)

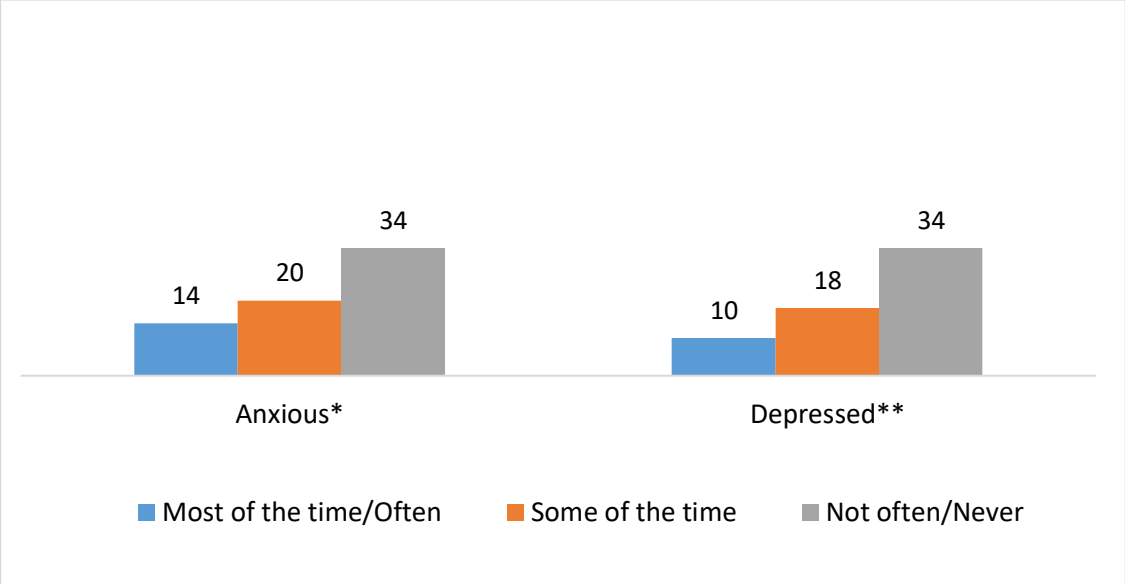


Figure 161: Mental health and talking to parents about school, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked: "How often do you talk to your parent or guardian about how things are going at school?"
*Anxious here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.
**Depressed here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Feeling Safe in the Neighborhood[a] and Past Year Substance Use Among Delaware 8th Grade Students (in percentages)

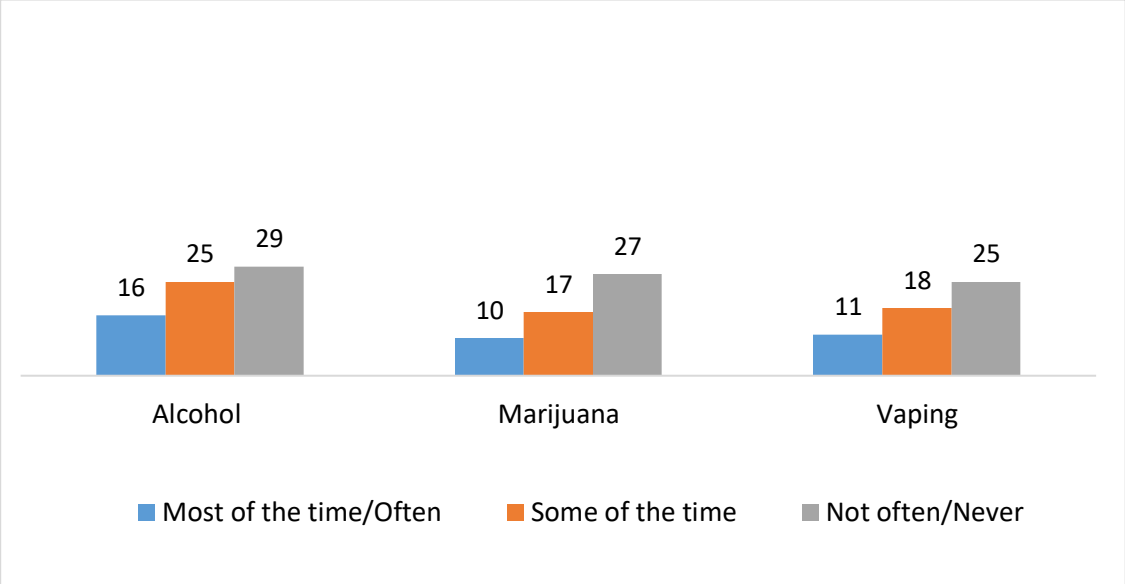


Figure 162: Past year substance use and feeling safe in their neighborhood, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked how often they feel safe in their neighborhood

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Feeling Safe in the Neighborhood[a] and Mental Health Among Delaware 8th Grade Students (in percentages)

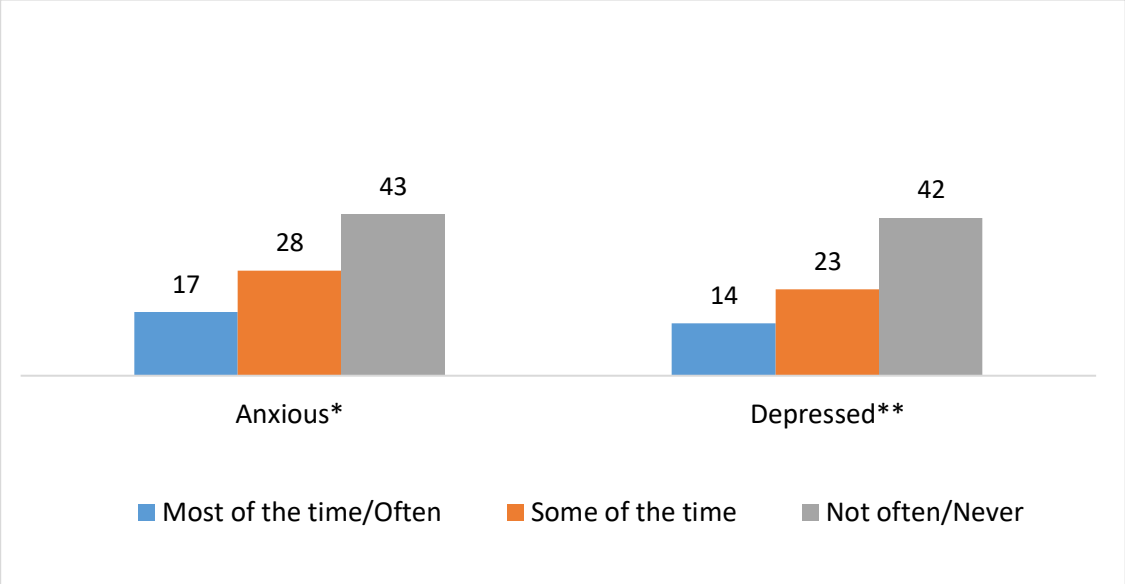


Figure 163: Mental health and feeling safe in neighborhood, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked how often they feel safe in their neighborhood
*Anxious here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.
**Depressed here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Feeling Safe at School[a] and
Past Year Substance Use Among Delaware 8th Grade Students
(in percentages)

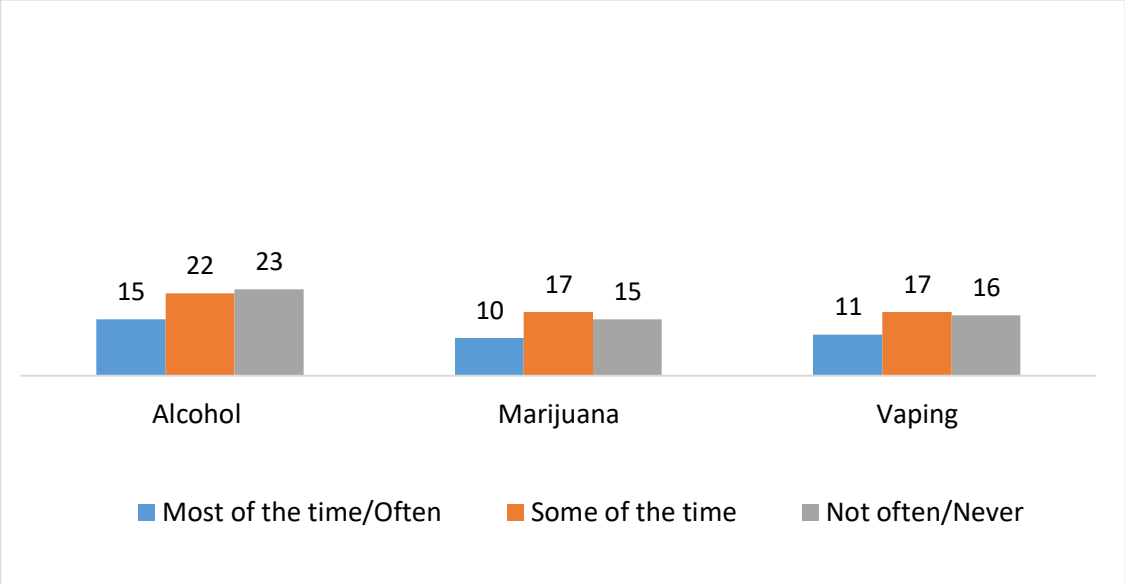


Figure 164: Past year substance use and feeling safe at school, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked how often they feel safe at school

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

2020 Delaware School Survey
Feeling Safe at School[a] and
Mental Health Among Delaware 8th Grade Students
(in percentages)

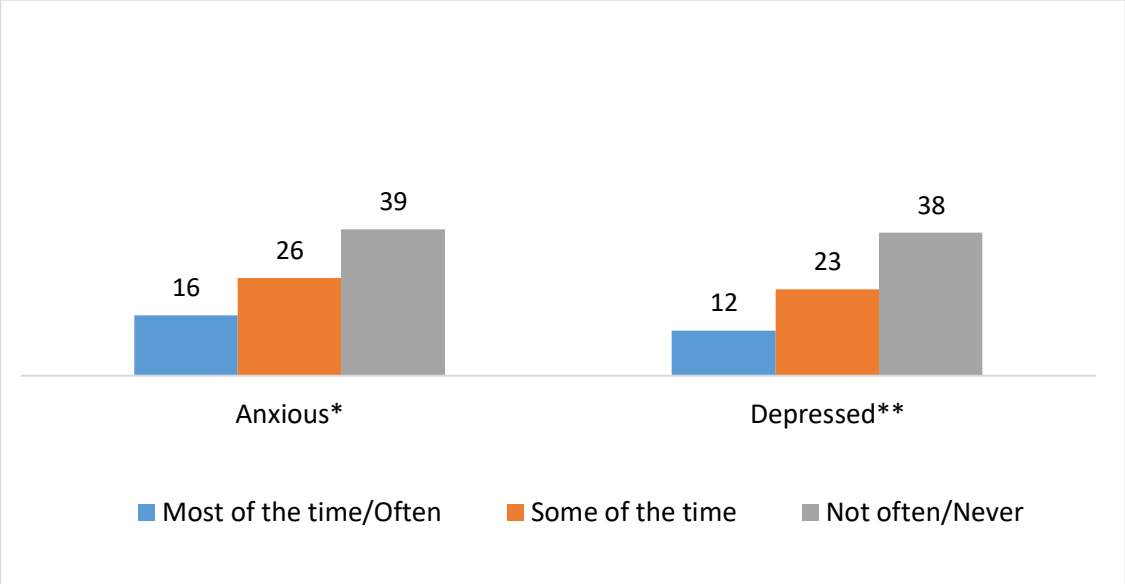


Figure 165: Mental health and feeling safe at school, 8th grade

Notes:
Unless otherwise noted, all estimates are statistically significant at the p<.05 level.
[a]Students were asked how often they feel safe at school
*Anxious here is reported as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.
**Depressed here is reported as students who respond that they have been bothered by feeling down, depressed or hopeless on more than half of the days in the past two weeks.

Source: Center for Drug & Health Studies. (2020). *Delaware Secondary School Survey: 8th Grade* [Annual Survey].

Back to table of figures

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Data Sources

Data Instrument	Most Recent Data	Trend Range
Delaware's Annual Traffic Statistical Report	2020	-
Delaware Behavioral Risk Factor Surveillance System (BRFSS)	2019	-
Delaware Prescription Monitoring Program (PMP)	2020	2012- 2020
Delaware School Survey (DSS) – 5th and 11th grades 8th grade*	*2019 2020	*1999 - 2019 1999 - 2020
Delaware Youth Risk Behavior Survey (YRBS) – High School	2017	1999 - 2017
Delaware Youth Risk Behavior Survey (YRBS) – Middle School	2019	1999 - 2019
DOMIP (Delaware Opioid Metric Intelligence Program)	2020	-
Monitoring the Future – 8th, 10th, and 12th grades	2020	1999 - 2020
National Youth Risk Behavior Survey (YRBS) – National	2019	1999 - 2019
Performance Measures, Delaware	2018	2014-2019
National Survey on Children's Health (NSCH)	2019	2016 - 2019
National Survey on Drug Use and Health (NSDUH)	2018-2019	2002 - 2019
Delaware Infants with Prenatal Substance Exposure	2020	2015-2020
Treatment Admissions Data	2019	-

In addition to the data sources for the figures and tables in the 2021 report, the following data sources are also cited throughout the narrative:

- America's Health Rankings
- American Psychological Association
- Bureau of Labor Statistics
- Center for Drug and Health Studies, University of Delaware
- Crisis Text Line
- Delaware Department of Education

- Delaware Department of Health and Social Services, Division of Public Health, My Healthy Community
- Delaware Department of Safety and Homeland Security, Division of Forensic Science
- Delaware Household Health Survey
- Drug Enforcement Administration
- KIDS COUNT in Delaware
- KFF
- National Academies of Sciences, Engineering, and Medicine
- National Center for Health Statistics
- National Conference of State Legislatures
- National Institute on Alcohol Abuse and Alcoholism
- National Institute on Drug Abuse
- National Institutes of Health
- National Institute on Mental Health
- Rapid Assessment of Pandemic Impact on Development – Early Childhood
- RTI International
- State of Delaware Economic Development Office
- The Trevor Project
- U.S. Census Bureau
- U.S. Centers for Disease Control and Prevention
- U.S. Health Resources and Services Administration